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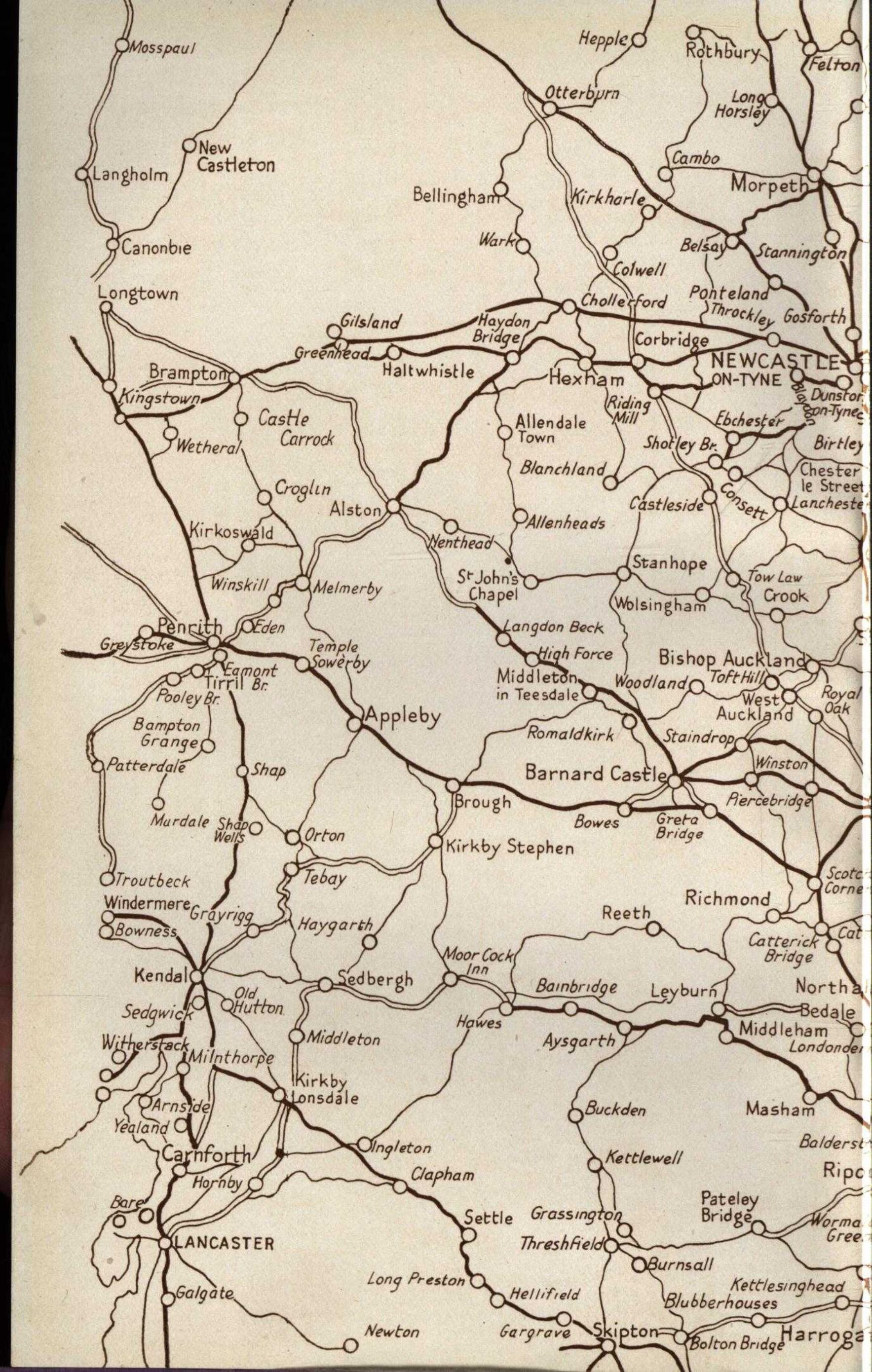
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Appleby
Bampton Grange
Romaldkirk
Staindrop
Patterdale
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Murdale
Shap Wells
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Orton
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Troutbeck
Tebay
Scotch Corner
Richmond
Windermere
Grayrigg
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Bowness
Haygarth
Catterick Bridge
Cat
Kendal
Moor Cock Inn
Northal
Sedbergh
Bainbridge
Leyburn
Old Hutton
Bedale
Sedgwick
Hawes
Middleham
Witherslack
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Middleton
Arnside
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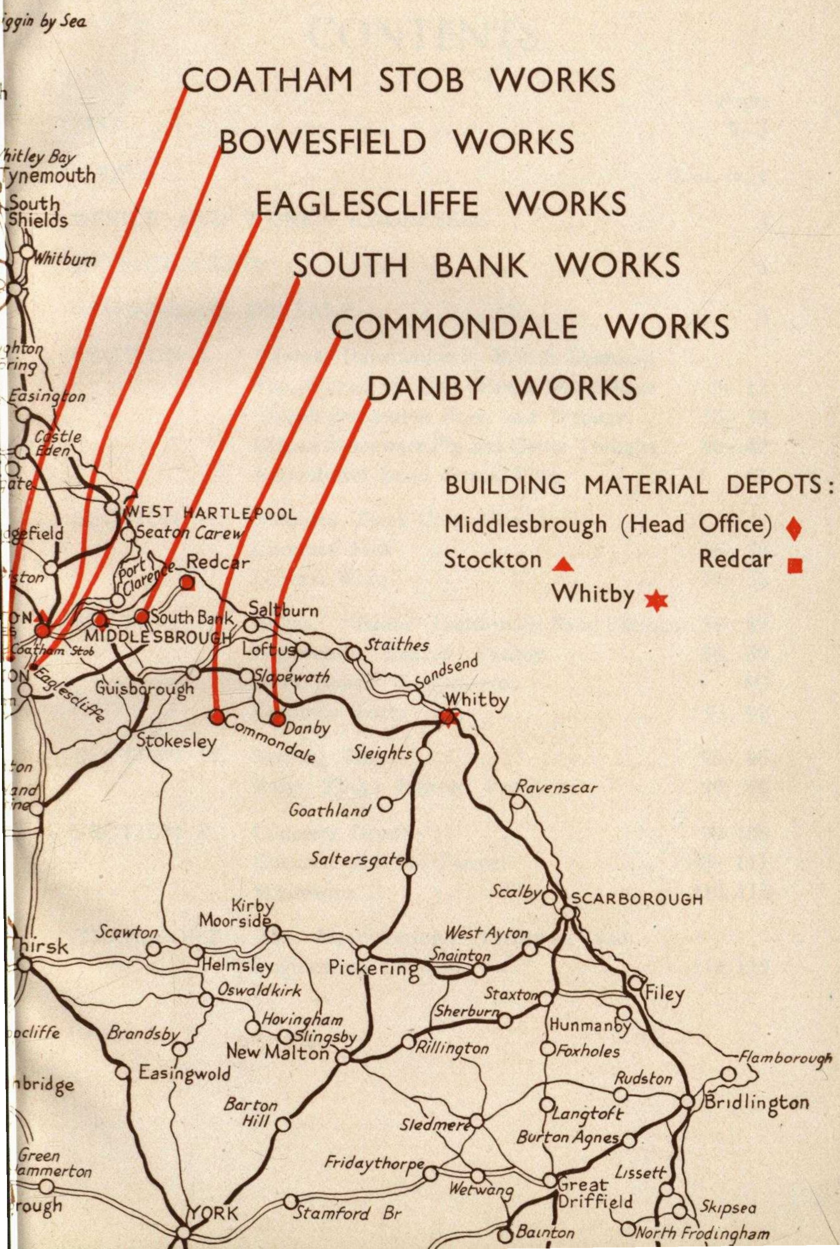
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SOUTH BANK WORKS
COMMONDALE WORKS
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Middlesbrough (Head Office) ♦
Stockton ▲
Redcar ■
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iggin by Sea
hitley Bay
Tynemouth
South Shields
Whitburn
ghton
ring
Easington
Castle Eden
ate
dgefield
ston
WEST HARTLEPOOL
Seaton Carew
Port Clarence
Redcar
South Bank
MIDDLESBROUGH
Coatham Stob
Eaglescliffe
Saltburn
Loftus
Staithes
Sandsend
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Guisborough
Slapewath
Commondale
Danby
Stokesley
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Foxholes
Flamborough
Easingwold
Rudston
Bridlington
Barton Hill
Langtoft
Sledmere
Burton Agnes
Green Hammerton
Fridaythorpe
Lissett
Wetwang
Great Driffield
Skipsea
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YORK
Stamford Br
Bainton
North Frodingham
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'Phone, Castleton 10.	Agricultural Land Drain Tiles. Common Bricks.
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TRANSPORT :

Middlesbrough Transport & Engineering Co. Ltd.,
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Please address all communications to Head Office.

INTRODUCTION

WE *have great pleasure in issuing this Catalogue for the use of our many customers. In it we have attempted to illustrate and describe those goods manufactured at our various Works, which are more or less in regular demand by the Trade, and have purposely* excluded *any goods which may have been specially made for specific purposes from time to time. We will always be glad to make the latter class of goods at any time, and quote to Architects', Engineers' or Contractors' specifications on receipt of enquiry.*

In all cases whether the goods be clay or concrete, from stock or made to special order, every effort is made to maintain our reputation for high quality.

All our Works are equipped to deal with either Rail or Road deliveries. Our Associated Company, Middlesbrough Transport & Engineering Co. Ltd., with its large fleet of modern lorries, ensures our being able to execute orders very promptly.

Good stocks are invariably on hand, but we would ask our customers to advise us of their requirements as early as possible, thus obviating any possible chance *of delay.*

In ordering, it will help us considerably, and avoid possible confusion, if customers will always quote Catalogue references.

We trust this Publication will be of use to all interested in our goods, and help us to improve that high standard of service we are continually striving to give.

CROSSLEY & SONS LTD.,
Middlesbrough.

October, 1937.

CONDITIONS OF SALE.

1. All quotations and printed prices are subject to alteration, or withdrawal, without notice.

2. All orders accepted, and promises for delivery given, subject to the necessary labour and materials being obtainable, and without accepting any responsibility for delays arising through risk of manufacture.

3. No responsibility can be accepted for losses, damages, or delay which are due to Act of God, War, Fire, Civil Commotion, Riots, Accidents, Breakdowns of Plant and Machinery, Aircraft, Strikes, Lock-outs, or any other causes beyond our control.

4. Offers for delivery from stock are made subject to goods remaining unsold upon receipt of order.

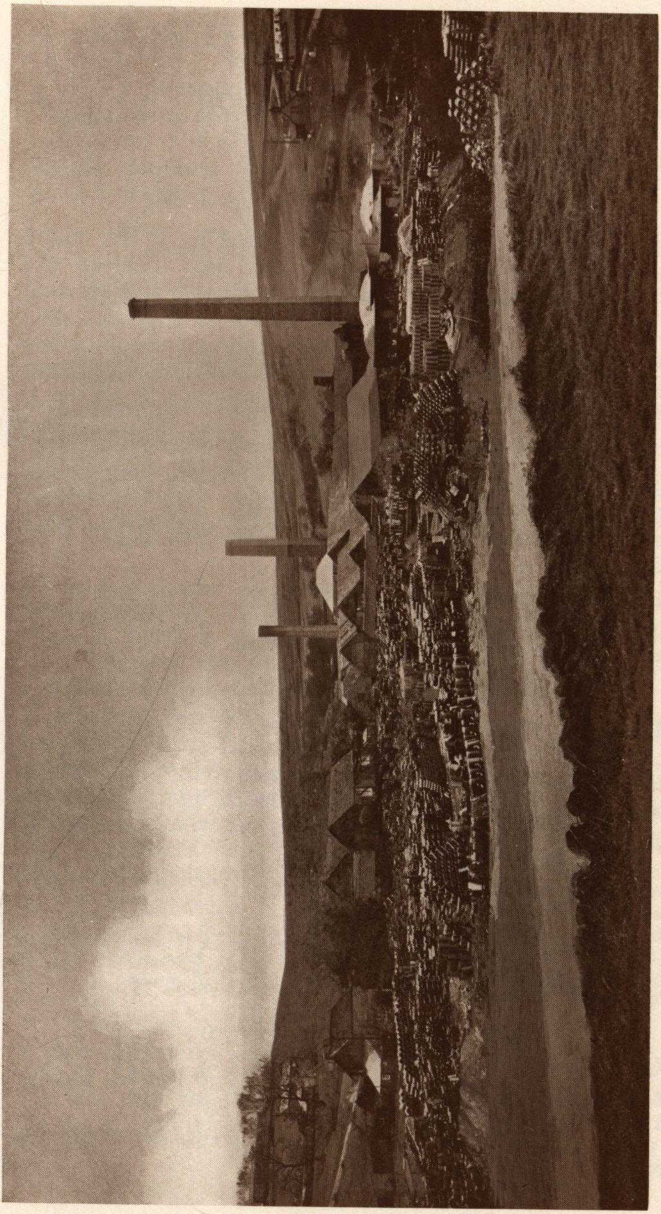
5. Claims for breakages, where goods are sent at sender's risk, or shortages occuring during transit, cannot be entertained, unless advised immediately, and such breakages or shortages notified in the books of the Railway Company, or Haulage Contractor and ourselves, and confirmed in writing within three days.

6. Customers must accept full responsibility for the suitability of the goods they order, and no claim on any other grounds than alleged defective workmanship or material can be entertained, and in such cases notification must be made in writing immediately, and in any event the allowance shall not exceed the prices charged for the goods themselves.

7. The sizes and weights shown in this Catalogue or on separate Price Lists, or quotations, are approximate only, as slight variations cannot be avoided in clay goods manufacture.

8. No responsibility can be accepted for any losses occasioned by delays on the Railway, or Road transport.

9. Delivery by motor lorry from Works direct to the site is subject to the lorry not proceeding further than good hard road will permit, and it is expected that the buyer will assist in unloading such goods as require stacking. Breakage or shortage (if any) to be stated on Driver's Ticket, in accordance with Paragraph 5.



GENERAL VIEW—COMMONDALE WORKS.

Deliveries can be made by rail or road to any station, site or dock in Great Britain.

GLAZED STONEWARE PIPES AND FITTINGS

GENERAL INFORMATION.

ACID RESISTING WARE PIPES.

THESE PIPES have been manufactured by us for many years at Commondale. During the years 1914–18 the Works were mainly employed in the manufacture of Acid Resisting Ware for Chemical Works, Explosive Factories, etc., and we are still supplying the regular requirements of certain similar Factories. Enquiries for this class of Ware will receive our careful and prompt attention.

ORDINARY STONEWARE PIPES AND FITTINGS.

It is an accepted fact that Stoneware Pipes are considerably stronger mechanically than Fireclay. Every care is taken in the manufacture of these to produce a high standard in glaze and finish.

The following sea water and absorption tests carried out on Commondale Ware Pipes gives us confidence in offering them for use where abnormal conditions prevail.

SEA WATER TEST.

The Ware was thoroughly immersed in sea water for 28 days; the surface under water being partly with the original skin left on, and the rest with the skin removed, thus exposing the body. The temperature varied from 55° to 100°F. to accelerate the test. At the end of this test the following observations were made :—

1. No sign of any action on the skin or body under water could be detected.
2. No action could be detected on water line.
3. Considerable crystalization had taken place on the upper part of the Ware from evaporation of the sea water, but there were no signs of disintegration, exfoliation or any other ill-effect.

ABSORPTION TEST.

Over a succession of six different tests on varying sizes of pipes, the variation was noted to be very slight indeed, and the mean percentage increase in weight was 1·80%.

Both these tests were carried out by an independent authority and NOT BY OURSELVES.

BRITISH STANDARD SPECIFICATION PIPES.

SINCE misapprehension often exists as to the meaning of the terms British Standard Pipes and British Standard Tested Pipes, we publish the following extract from the British Standard Specification for Salt-Glazed Ware Pipes, January 1937.

> "Pipes complying with these Specifications are subjected to certain plusages on current list prices."

We shall be glad to quote for these upon application.

BRITISH STANDARD SPECIFICATION FOR SALT GLAZED WARE PIPES.

Extracted by permission of the British Standards Institution, from British Standard Specification No. 65, 1937, for Salt-Glazed Ware Pipes, official copies of which can be obtained from the British Standards Institution, 28 Victoria Street, London, S.W.1., price 2/2 each, post free.

Definition and Classification of Straight Pipes.

2. The salt-glazed ware pipes and fittings manufactured in accordance with this specification shall be known as British Standard Salt-Glazed Ware Pipes and Fittings.

They shall be one of two classes as may be required, viz.:

> BRITISH STANDARD SALT-GLAZED WARE PIPES AND FITTINGS which comply in every respect with the requirements of this specification, but of which only a percentage of the pipes ordered (as provided for in Clause 14) have been submitted to the Hydraulic Test specified in Clause 13.
>
> BRITISH STANDARD TESTED SALT-GLAZED WARE PIPES which comply in every respect with the requirements of this specification, every pipe supplied having satisfactorily withstood the Hydraulic Test specified in Clause 13.

Thickness of Straight Pipes.

4. The barrels and the sockets of the pipes shall be of not less than the minimum mean thickness shown in column 2 of Table 1 on page 13, except as provided for in Clause 10.

Sockets.

5. The interior of the sockets shall be conical, having a taper of 1/16th inch, measured on the diameter per inch of length (*i.e.*, 1 in 32). The depth of the sockets shall be in accordance with Table 1 on page 13. The width of the shoulder of the socket of any individual pipe shall exceed the mean thickness of the barrel by not less than the figures given in column 4 on Table 1, on page 13.

Length of Straight Pipes.

6. The length of the barrels of straight pipes, exclusive of the internal depth of socket, shall be in accordance with the following table :—

Internal Diameter of Pipe Ins.	Length of Pipe
Up to and including 6 ..	2 ft.
7 and 8	2 ft. and 2 ft. 6 ins.
9 to 36 inclusive	2 ft., 2 ft. 6 ins. and 3 ft.

Note.—The above are the standard lengths for the home market. For export, lengths of 2 ft., 2 ft. 6 ins. and 3 ft. in all diameters are permissible.

Grooving.

8. The interior of the sockets and the exterior of the spigots shall be grooved and such grooving on the spigot shall be for a length equal to 1½ times the depth of the sockets, and the depth of such grooves shall be not less than 1/16th inch.

Hydraulic Test.

13. The pipes, when subjected to the hydraulic test at the Manufacturers' Works, shall withstand an internal hydraulic test pressure on the barrels of the pipes of 20 lbs. per square inch without showing signs of injury or leakage. The pressure shall be applied at a rate not exceeding 10 lbs. per square inch in five seconds, and full pressure shall be maintained for at least five seconds. Care shall be taken that all air is extracted before the test is commenced.

The purchaser (or his representative) shall have the right to be present at the application of the test.

Number of Hydraulic Tests.

14. BRITISH STANDARD SALT-GLAZED WARE PIPES. Should the purchaser (or his representative) so desire, 5 per cent. of the pipes ordered may be selected for testing under the Hydraulic test at the Manufacturers' Works.

BRITISH STANDARD TESTED SALT-GLAZED WARE PIPES. Every British Standard Tested Salt-Glazed Ware Pipe shall have been subjected to and have withstood the hydraulic test specified in Clause 13.

Absorption Test.

15. The test pieces selected for testing shall be taken from the body of the pipe or fitting and in the case of pipes not within six inches of the end. Each test piece shall be of the whole thickness of the pipe or fitting, and shall have two glazed surfaces, each having an area of not less than 8 inches super nor more than 20 inches super. The test pieces shall be dried at a temperature of not less than 150°C. (302°F.) until no further loss of weight can be noted. They shall then be immersed in cold water and the temperature raised to boiling point—100°C. (212°F.) The water shall be maintained at that temperature for one hour, and after it has been allowed to cool the test pieces shall be removed, carefully wiped with a dry cloth, and then re-weighed. The percentage increase in weight of each test piece by absorption of water shall not exceed the figures given in the following table:—

Thickness of Pipe or Fitting Ins.	Increase in Weight per cent.
¾ and under	6
Over ¾ and up to 1	7
Over 1 and up to 1¼	8
Over 1¼ and up to 1½	9
Over 1½	10

The absorption tests shall be carried out at the Manufacturer's works by the Purchaser (or his Representative) before the pipes are despatched.

Number of Absorption Tests.

16. One absoption test may be made from every 100 pipes or fittings ordered if the Purchaser (or his Representative) so desires.

Non-Compliance with Tests and Requirements.

18. Should any pipe or fitting be found after delivery not to have been made in conformity with the foregoing tests and requirements of this specification, other than the hydraulic and absorption tests specified in Clauses 13 and 15 respectively, such pipe or fitting may be rejected.

Marking.

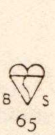
19. Every pipe and fitting shall have legibly impressed upon it before firing the name or Trade Mark of the Manufacturer.

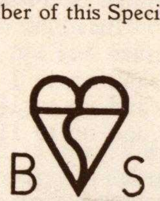
Every British Standard Tested Pipe shall also have stencilled upon it, before leaving the Works, in indelible black and in letters of not less than 1″ high, the word " Tested," which shall be coupled with the stencilled name or Trade Mark of the Manufacturer, *e.g.*,

X & Co. TESTED.

Note.—Only pipes and fittings satisfying the requirements of this Specification and made by Manufacturers licensed by the British Standard Institution may be marked by a Licence with the Registered Mark of the Institution.

The Registered Mark shown in the sketch will be stencilled on the pipes in indelible black with the number of this Specification, *e.g.*:—





British Standard Tested Salt-Glazed Ware Pipes will have the " Tested " mark added to the above marking.

Particulars of the conditions under which Licences to use the Mark are granted can be obtained on application to the British Standards Institution, 28 Victoria Street, London, S.W.1.

BRITISH STANDARD SALT-GLAZED WARE PIPES

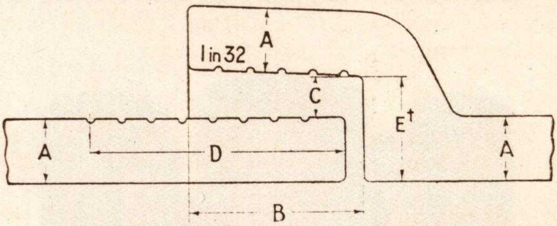
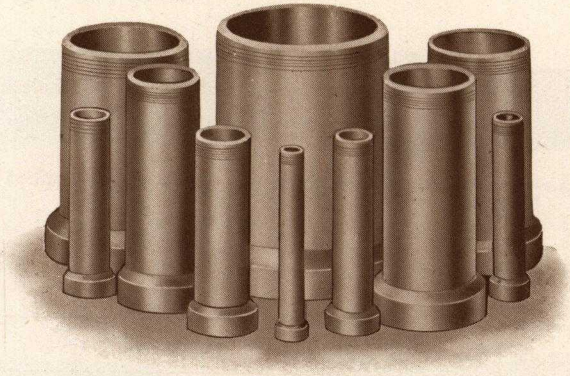


TABLE 1.—DIMENSIONS OF STRAIGHT PIPES & SOCKETS

1	2	3	4	5
Internal Diameter of Pipe (see Clause 11).	Minimum Mean Thicknesses of Barrel and Socket (see Clause 10). **A**	Minimum Internal Depth of Socket (see Clause 5). **B**	Minimum Excess Shoulder Measurement (see Clause 5). **C**	Minimum Length of Grooving on Spigot (see Clause 8). **$D=1\frac{1}{2}B$**
in.	in.	in.	in.	in.
3	$\frac{7}{16}$	2	$\frac{5}{16}$	3
4	$\frac{1}{2}$	2	$\frac{3}{8}$	3
5	$\frac{9}{16}$	$2\frac{1}{4}$	$\frac{7}{16}$	$3\frac{3}{8}$
6	$\frac{5}{8}$	$2\frac{1}{4}$	$\frac{7}{16}$	$3\frac{3}{8}$
7	$\frac{11}{16}$	$2\frac{1}{4}$	$\frac{7}{16}$	$3\frac{3}{8}$
8	$\frac{11}{16}$	$2\frac{1}{2}$	$\frac{1}{2}$	$3\frac{3}{4}$
9	$\frac{3}{4}$	$2\frac{1}{2}$	$\frac{1}{2}$	$3\frac{3}{4}$
10	$\frac{13}{16}$	$2\frac{3}{4}$	$\frac{5}{8}$	$4\frac{1}{8}$
12	1	$2\frac{3}{4}$	$\frac{5}{8}$	$4\frac{1}{8}$
13	$1\frac{1}{16}$	3	$\frac{5}{8}$	$4\frac{1}{2}$
14	$1\frac{3}{16}$	3	$\frac{5}{8}$	$4\frac{1}{2}$
15	$1\frac{1}{4}$	3	$\frac{5}{8}$	$4\frac{1}{2}$
18	$1\frac{1}{2}$	3	$\frac{5}{8}$	$4\frac{1}{2}$
21	$1\frac{5}{8}$	$3\frac{1}{4}$	$\frac{3}{4}$	$4\frac{7}{8}$
24	$1\frac{3}{4}$	$3\frac{1}{2}$	$\frac{3}{4}$	$5\frac{1}{4}$
27	$1\frac{7}{8}$	$3\frac{1}{2}$	$\frac{3}{4}$	$5\frac{1}{4}$
30	2	$3\frac{1}{2}$	$\frac{3}{4}$	$5\frac{1}{4}$
36	$2\frac{1}{2}$	$3\frac{1}{2}$	1	$5\frac{1}{4}$

† **E**=Width of Shoulder of Socket which must exceed the mean thickness of the Barrel of the Pipe (ascertained as directed in Clause 5) by not less than the values for **C** given in column 4.

GLAZED
STONEWARE PIPES



Sizes ..	2″	3″	4″	5″	6″	7″	8″	9″	10″	12″	15″	18″	21″	24″	Int. Dia.
Weights.	180	125	80	60	50	44	36	28	20	14	9½	6½	5	4	Lin. Yds. per ton.

STANDARD LENGTHS.

2″ diam. .. .. .. 1′ 6″ long each pipe
3″ diam. to 7″ .. .. 2′ 0″ long each pipe
8″ diam. to 10″ .. .. 2′ 6″ long each pipe
12″ diam. to 24″ .. .. 3′ 0″ long each pipe

SHORT LENGTHS.

Pipes up to 9″ diameter supplied to order, in 6″, 9″ and 12″ lengths to obviate cutting.

GLAZED STONEWARE PIPES

continued.

Fig. S 1. Perforated Pipes supplied to order with the whole or part of the surface perforated as required, in all sizes.

Fig. S 3. Butt Jointed Pipes, with two spigot ends, supplied in all sizes.

Fig. S 3. Flue Linings.

Rectangular	7″ × 7″	10″ × 7″	12″ × 7″	Internal Dim.		
Circular	6″	8″	9″	10″	12″	Internal
Weight	55	40	30	24	17	Yds. per Ton

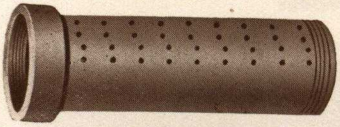
Fig. S 4. Channel Pipes : Half-Round in same sizes and lengths as straight pipes. Weights pro ratio to whole pipes.

Fig. S 5. Access Pipes made in 4″ and 6″ sizes and supplied with Lid, unless otherwise ordered.

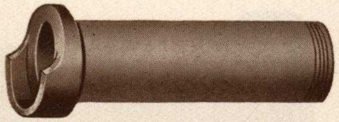
GLAZED STONEWARE PIPES

continued.

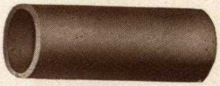
STRAIGHT FITTINGS.



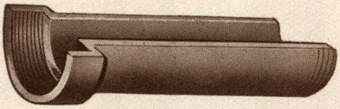
Perforated Pipe
Fig. S 1



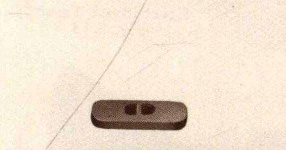
Half Socket
Fig. S 2



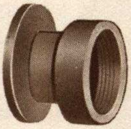
Butt Jointed Pipe
(Glazed)
or Flue Lining (Ung.)
Fig. S 3



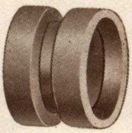
½ Round Channel Pipe
Fig. S 4



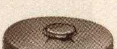
Access Pipe
Fig. S 5



Reducing
Collar
Fig. S 6



Double
Socket
Fig. S 7

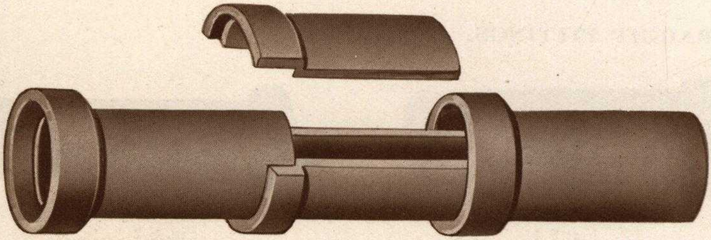


Pipe
Stopper
Fig. S 8

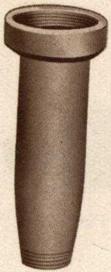
GLAZED STONEWARE PIPES

continued.

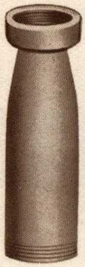
STRAIGHT FITTINGS.



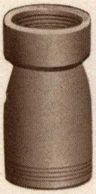
Opercular Pipe
Fig. S 9.



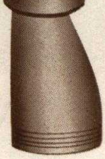
Ordinary Taper
Fig. S 10



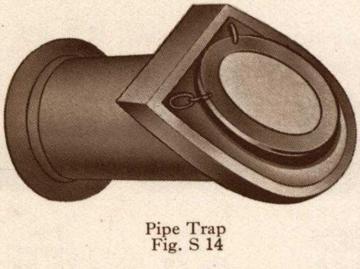
Reverse Taper
Fig. S 11



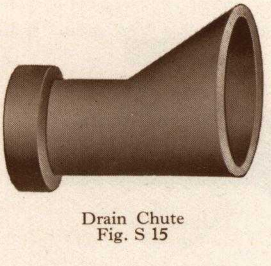
Short Taper
Fig. S 12



Level Invert Taper
Fig. S 13



Pipe Trap
Fig. S 14



Drain Chute
Fig. S 15

Fig. S 14. Pipe Trap, with Cast Iron Flap, made in 4″, 6″ and 9″ sizes.

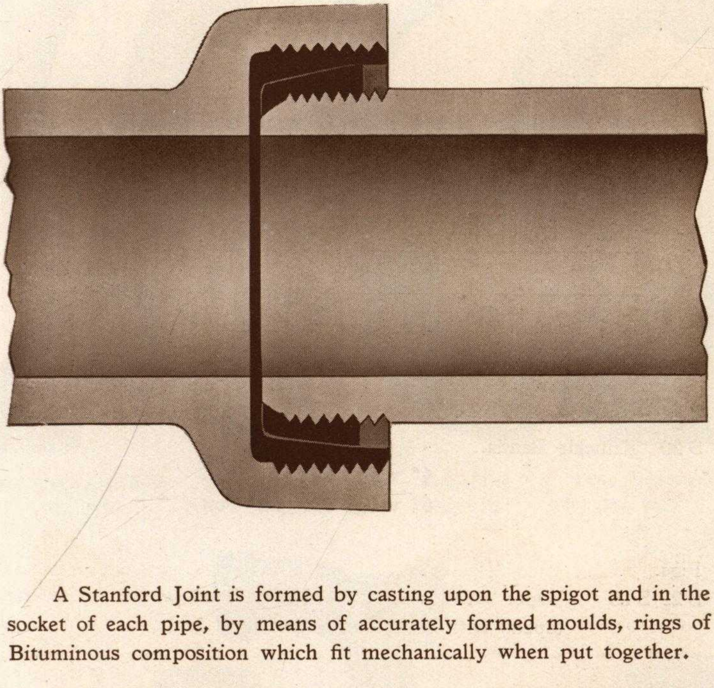
Fig. S 15. Drain Chute, made in 4″, 6″ and 9″ sizes.

Re Figs. S 10, S 11, S 12, S 13 : Also supplied in Channels, half-round section.

GLAZED STONEWARE PIPES

continued.

THE STANFORD JOINT.



A Stanford Joint is formed by casting upon the spigot and in the socket of each pipe, by means of accurately formed moulds, rings of Bituminous composition which fit mechanically when put together.

In laying pipes with this joint, the spigot of one is inserted into the socket of another already laid, the joint surfaces having been previously smeared with some kind of grease.

GLAZED STONEWARE BENDS

continued.

Figs.
S 16/S 19 Ordinary Bends, made in same size as pipes.

AVERAGE No. PER TON.					
4″	6″	9″	12″	15″	18″
140	80	42	17	12	9

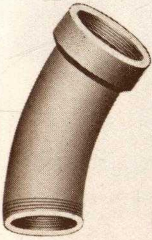
Fig.
S 20 Knuckle Bends.

Weights :
4″ weigh 204 per Ton
6″ weigh 125 per Ton

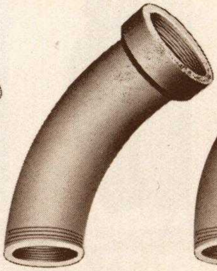
Figs.
S 22/S 23 Taper Bend and Taper Rest Bend made as reverse tapers, with socket on larger sized end.

GLAZED STONEWARE BENDS

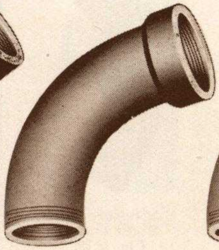
ORDINARY BENDS



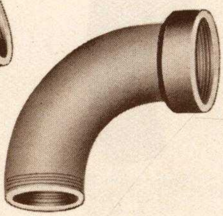
No. 1 Bend
No. S 16



No. 2 Bend
No. S 17

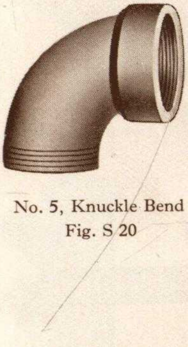


No. 3 Bend
No. S 18

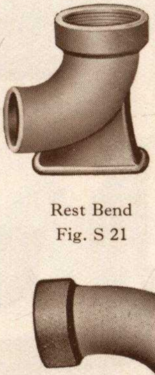


No. 4 Bend
No. S 19

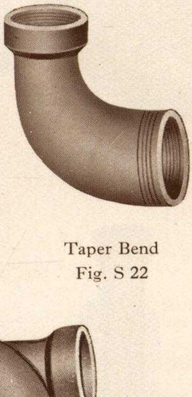
OTHER BENDS



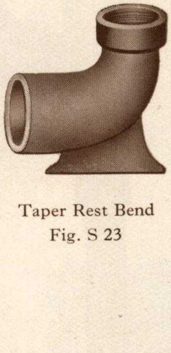
No. 5, Knuckle Bend
Fig. S 20



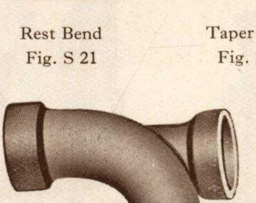
Rest Bend
Fig. S 21



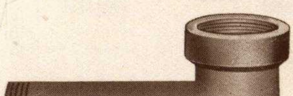
Taper Bend
Fig. S 22



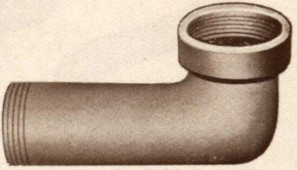
Taper Rest Bend
Fig. S 23



Cleansing Arm
Bend
Fig. S 24

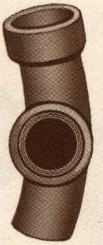


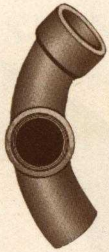
Square Elbow
Fig. S 25

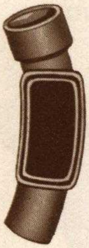


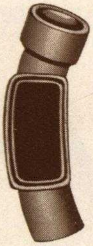
Round Elbow
Fig. S 26

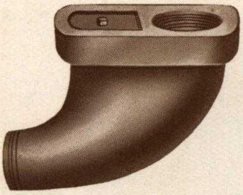
GLAZED STONEWARE BENDS

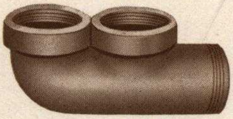

Inspection Bend
Left Hand
Fig. S 27

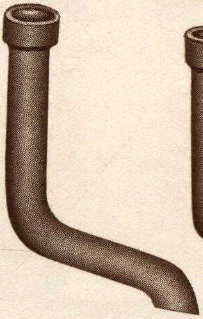

Inspection Bend
Right Hand
Fig. S 28

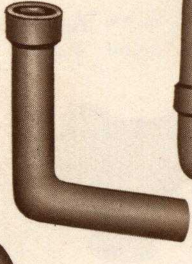

Access Bend
Left Hand
Fig. S 29

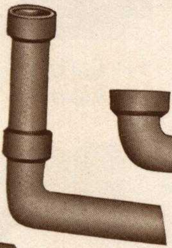

Access Bend
Right Hand
Fig. S 30

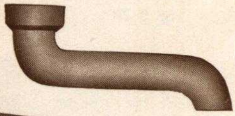

Soil Pipe Connection
Fig. S 31


Rain Water Shoe
Fig. S 32


Sink Bend No. 1
Fig. S 33


Sink Bend No. 2
Fig. S 34

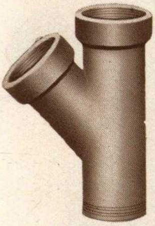

Sink Bend No. 3
Fig. S 35

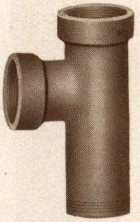

Sink Bend No. 6
Fig. S 36

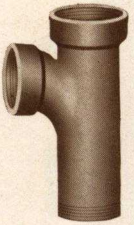
Figs. S 27/S 28 Inspection Bends, made in 4″ and 6″ sizes :
4″ with 4″ eye ; 6″ with 6″ eye.
Fig. S 32. Rainwater Shoe, made in 4″ and 6″ sizes :
4″ with 4″ inlet ; 6″ with 6″ inlet.
Figs. S 33/S 36 Sink Bends, made in 2″ size.

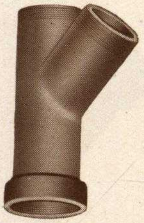
GLAZED STONEWARE JUNCTIONS

SINGLE JUNCTIONS.

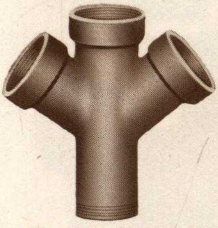

No. 1 Junction
Fig. S 37

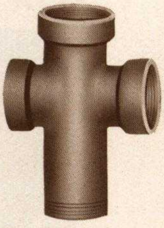

No. 2 Junction
Fig. S 38

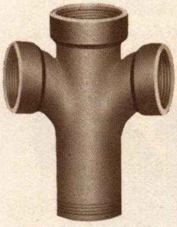

No. 3 Junction
Fig. S 39

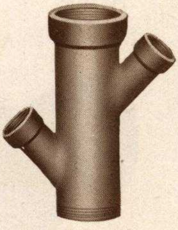

No. 10 Junction
Tumbling Bay Junction
Fig. S 46

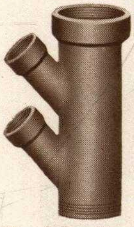
DOUBLE JUNCTIONS.

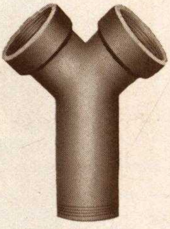

No. 4 Junction
Fig. S 40

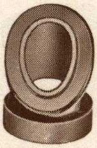

No. 5 Junction
Fig. S 41

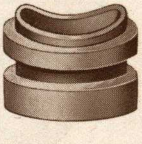

No. 6 Junction
Fig. S 42


No. 7 Junction
Fig. S 43


No. 8 Junction
Double Oblique
(One Sided)
Fig. S 44


No. 9 Junction
Spaced Oblique
Fig. S 45


Oblique Saddle
Fig. S 47

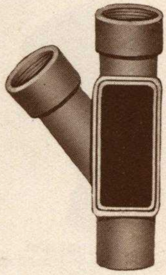

Square Saddle
Fig. S 48

Figs.
S 37/S 46 Junctions, made in sizes and lengths as straight pipes.

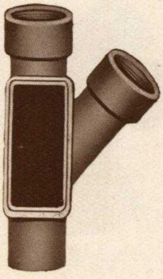
AVERAGE No. PER TON					
4″	6″	9″	12″	15″	18″
80	53	26	13	8	6

GLAZED STONEWARE JUNCTIONS

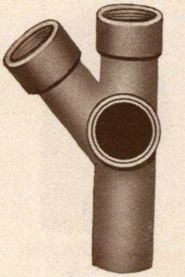
INSPECTION JUNCTIONS.



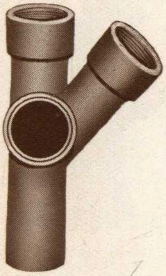
Access Junction
Left Hand
Fig. S 49



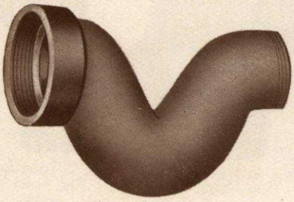
Access Junction
Right Hand
Fig. S 50



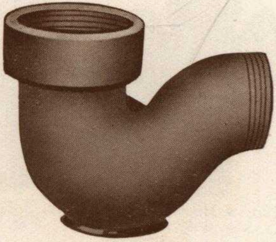
Inspection Junction
Left Hand
Fig. S 51



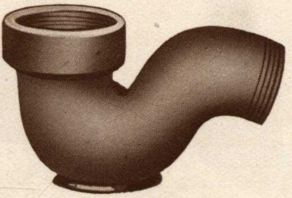
Inspection Junction
Right Hand
Fig. S 52



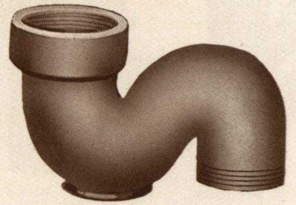
Plain Syphon
Fig. S 53



P Trap
Fig. S 54



Q Trap
Fig. S 55

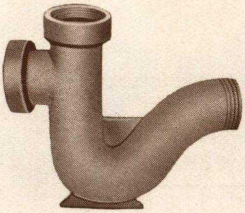


S Trap.
Fig. S 56

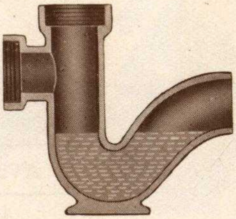
Figs. S 51/S 52	Inspection Junctions, made in Standard sizes, 4″ and 6″: 4″ with 4″ eye ; 6″ with 6″ eye.
Fig. S 53.	Syphon, made in Standard sizes, 2″, 3″, 4″, 6″ and 9″ : made to order with vertical or oblique inlets at socket or spigot ends, or in centre.
Figs. S 54/S 56	“ P,” “ Q,” and “ S ” Traps, made in sizes 2″, 3″, 4″, 6″ and 9″, with inlets as required.

GLAZED STONEWARE INTERCEPTING TRAPS

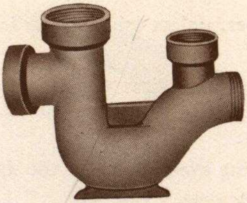
BUCHAN TRAPS.



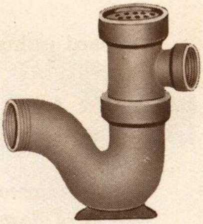
Buchan Trap No. 1
Fig. S 57



Section Buchan Trap. No. 1
Fig. S 57



Buchan Trap, No. 2
Fig. S 58



Buchan Trap No. 3
Fig. S 59

Figs.
S 57/S 58 Buchan Traps, made in Standard sizes, 4″, 6″ and 9″.

AVERAGE No. PER TON		
4″	6″	9″
63	40	20

Fig. S 59. Extension Pieces or Risers, with or without horizontal or vertical inlets, similar to that shown in Fig. S 59, made to order to work with this or any other trap or gulley.

GLAZED STONEWARE INTERCEPTING TRAPS

continued.

Figs.
S 60/S 62 Winser and Kenon Interceptors, made in sizes 4″, 6″ and 9″

AVERAGE No. PER TON		
4″	6″	9″
80	56	20

Supplied with stoneware stopper, unless otherwise ordered.

Fig. S 63. Reverse Action Interceptor, made in sizes 4″, 6″ and 9″, with or without inlets, as shown.

This Interceptor has the cleaning eye looking up the drain, instead of down as in ordinary type.

Its object is to reduce the number of manholes, one only being necessary where house connections on opposite sides of the common drain meet at the double junction, instead of two manholes as would otherwise be required.

GLAZED STONEWARE INTERCEPTING TRAPS

continued.

WINSER INTERCEPTOR.

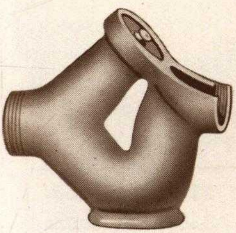
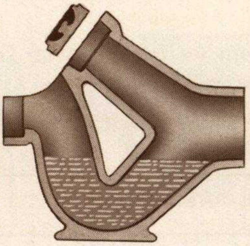
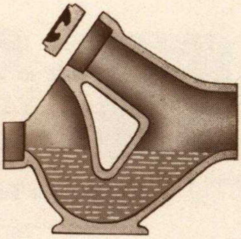


Fig. S 60.



With fall between inlet and outlet.
Section S 60.



Inlet and outlet level.
Section S 61.

KENON INTERCEPTOR.

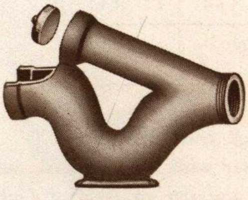
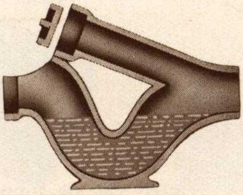


Fig. S 62.



Section S 62.

REVERSE ACTION INTERCEPTOR.

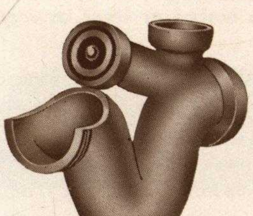
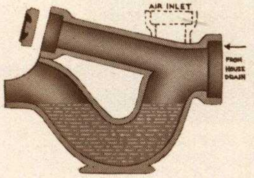


Fig. S 63.



Section S 63.

GLAZED STONEWARE GULLIES

continued.

Fig. S 64. North Eastern (or Self-Cleaning) Gully,
Made in the following sizes :—

Size ..	6″ × 3″	6″ × 4″	9″ × 4″	9″ × 6″
No. per Ton	86	80	53	40

Fig. S 65. Dish Cover and Metal.

Size ..	12″ × 12″	15″ × 15″
No. per Ton	97	52

Fig. S 66. Special Dish Cover with Back Inlet.
This or any other type of riser with horizontal or vertical inlets can be supplied to fit any size or type of Gully.

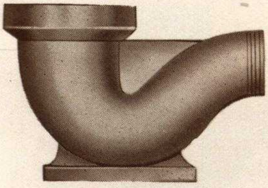
Figs. S 67/S 68 Special Deep Anti-Splash Dish Cover, or ordinary, made with round or square metal, hinged or loose, as required.

Fig. S 69. Dish Cover and Channel made in 18″ and 24″ lengths by 12″ wide.

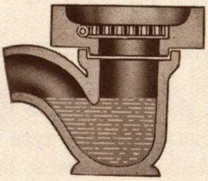
Fig. S 70. Heavy Stable Pattern Cover and Metal.
Size 15″ × 15″, with 7″ × 7″ opening. No. per Ton, 36.

GLAZED STONEWARE GULLIES

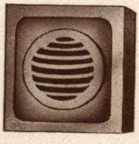
NORTH EASTERN OR SELF-CLEANSING TYPE.



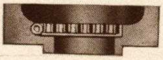
North Eastern Gully
Fig. S 64



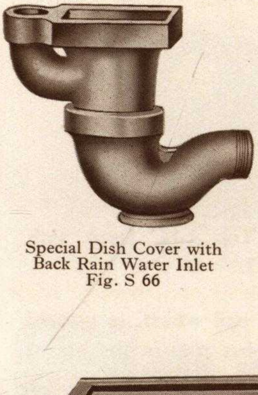
Section N. E. Gully
with Dished Cover & Metal
Fig. S 64



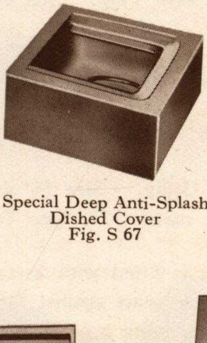
Dish Cover & Grate
Fig. S 65



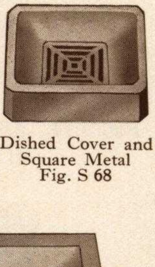
Section



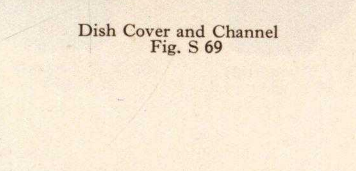
Special Dish Cover with
Back Rain Water Inlet
Fig. S 66



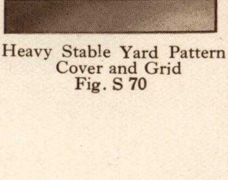
Special Deep Anti-Splash
Dished Cover
Fig. S 67



Dished Cover and
Square Metal
Fig. S 68



Dish Cover and Channel
Fig. S 69



Heavy Stable Yard Pattern
Cover and Grid
Fig. S 70

GLAZED STONEWARE GULLIES

continued.

Fig. S 71. Commondale One-Piece Gulley.—Sizes as shown on Section. No. per Ton, 40.

This Gully is a "one-piece" adaptation of the North Eastern Gully fitted with loose dish cover. By its use a joint is eliminated and any possible leakage therefrom. It differs from the usual fixed top type of gulley as in this case the top is made round, allowing the gully to be turned to suit the angle of the drain. Also note the efficient anti-splash rim.

Fig. S 96. Ebor Rust Trap. Size 4″ inlet and outlet. No. per Ton 53.

Fig. S 97. Billingham Rust Trap. Size 4″ inlet and outlet. No. per Ton 75.

Fig. S 72. Ordinary 9″×4″ Gully. No. per Ton 50.

Fig. S 73. Ordinary 6″×4″ Gully. No. per Ton 74.

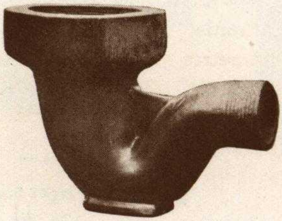
Fig. S 74. Ball Valve Gully. Size 14″×14″ Top ×14″ Deep, with 6¼″ square metal. No. per Ton 23.

This Gully is fitted with a copper ball which, in case of flooding back, seats against the rubber ring in the top of the Gully, forming a perfect seal.

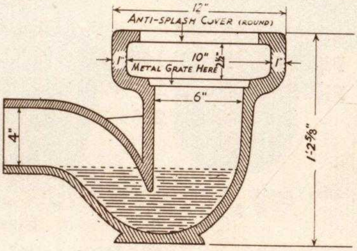
GLAZED STONEWARE GULLIES

continued.

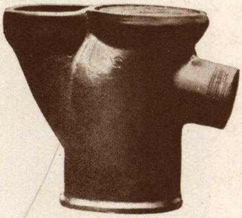
COMMONDALE ONE-PIECE GULLY.



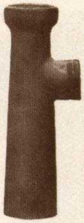
View
Fig. S 71



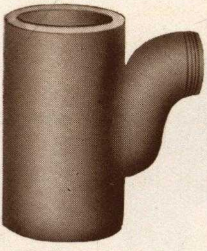
Section Dimension
Fig. S 71



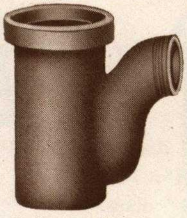
Ebor Rust Trap
Fig. S 95



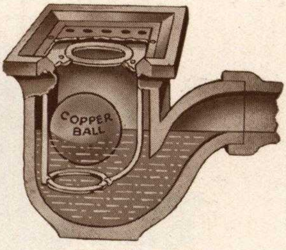
Billingham Rust Trap
Fig. S 97



Ordinary 9″ Gully
Fig. S 72



Ordinary 6″ Gully
Fig. S 73



Ball Valve Gully
Fig. S 74

GLAZED STONEWARE GULLIES

continued.

SQUARE STREET GULLY.

		Sizes	*No. per Ton*	*Weight each*
Fig. S 75.	No. 1	14″ × 12″ × 21″ Deep × 6″ outlet	17	130 lbs.
Fig. S 76.	No. 2	20″ × 20″ × 17″ Deep × 6″ outlet	17	130 lbs.
		21″ × 21″ × 21″ Deep × 6″ outlet	10	220 lbs.

ROUND STREET GULLY.

	Sizes	*No. per Ton*	*Weight each*
Fig. S 77.	12″ Diam. × 24″ deep × 6″ outlet	18	125 lbs.
	12″ Diam. × 30″ deep × 6″ outlet	16	145 lbs.
	12″ Diam. × 36″ deep × 6″ outlet	14	165 lbs.
	15″ Diam. × 30″ deep × 6″ outlet	14	165 lbs.
	15″ Diam. × 36″ deep × 6″ outlet	12	185 lbs.
	15″ Diam. × 42″ deep × 6″ outlet	11	205 lbs.
	18″ Diam. × 36″ deep × 6″ outlet	11	205 lbs.
	18″ Diam. × 42″ deep × 6″ outlet	10	225 lbs.

Fig. S 78.

SHARP'S GULLY.

		Size	
	External Top	*Internal Top*	*Internal Depth*
No. 1 ..	21½″ × 16½″	14″ × 9½″	30″
No. 2 ..	15½″ × 14½″	9″ × 8″	20″
No. 3 ..	12½″ × 12½″	8½″ × 8½″	15″

Fig. S 79.

Grease Trap.

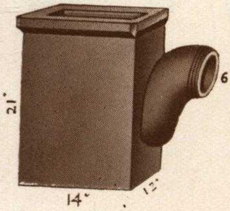
Fitted with Heavy Cover and Metal Grid and C.I. Lift-out Bucket.

Size of Gully, 9″ diam. × 21″ deep × 4″ outlet.
Size of Cover, 18″ × 18″.
Size of Metal, 11″ diam.
No. per Ton, complete, 8.

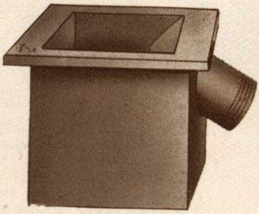
GLAZED STONEWARE GULLIES

continued.

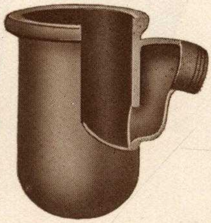
STREET GULLIES.



Square Street Gully
Fig. S 75



Square Street Gully
Fig. S 76



Round Street Gully
Fig. S 77

SHARP'S GULLIES.

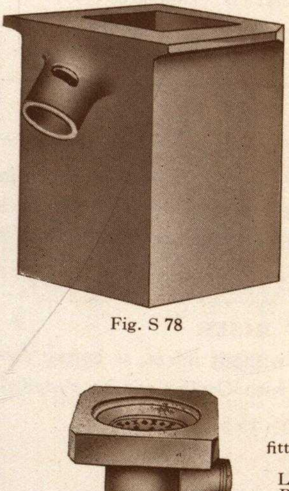
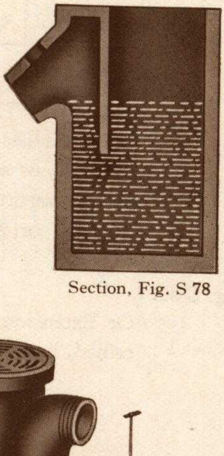
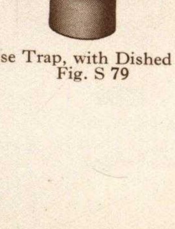


Fig. S 78

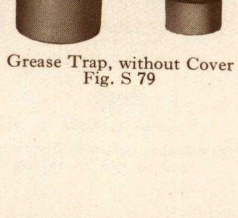


Section, Fig. S 78



Grease Trap, with Dished Cover
Fig. S 79

Both
fitted with
C. I.
Lift-out
Bucket.



Grease Trap, without Cover
Fig. S 79

GLAZED STONEWARE GULLIES

continued.

Figs.

LONDON GULLIES.

S 80/S 81 Standard sizes, 4″ × 4″, 6″ × 3″, 6″ × 4″, 9″ × 4″, 9″ × 6″, made with 3″ outlet if required.

WEIGHTS

Size ..	4″ × 4″	6″ × 3″	6″ × 4″	9″ × 4″	9″ × 6″
No. per ton	90	80	60	52	35

These Gullies supplied with P, Q, or S outlets as shown in Fig. S 80, or with outlet on angle as Fig. S 81, and with back or side vertical and/or horizontal inlets as plan. Size of inlets 3″ or 4″, as ordered.

Fig. S 82.

GULLEY RISER

Or Extension Piece, with or without inlets, as before described, and in sizes to work with Gullies can be supplied.

GLAZED STONEWARE GULLIES

LONDON GULLIES (OR YARD).

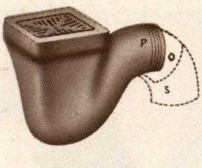


Fig. S 80
N.B.—These gullies are also supplied with Q and S outlets as indicated by the dotted lines.

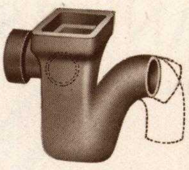


Fig. S 80
When ordering gullies with inlets, the position of the inlets should be specified by the letters in the diagrams shown.

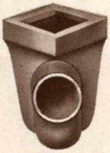


Fig. S 81

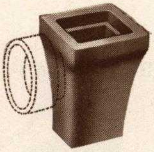
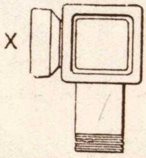


Fig. S 82

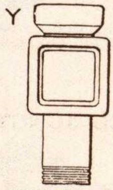
INLETS TO SQUARE GULLIES.

N.B.—When ordering, inlets should be specified as lettered below, with size required.

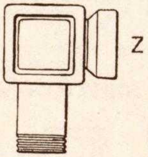
HORIZONTAL INLETS.



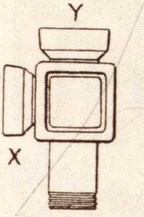
With X Inlet



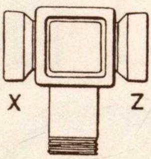
With Y Inlet



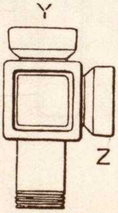
With Z Inlet



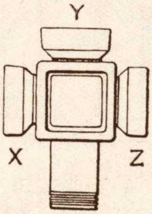
With X and Y Inlets.



With X and Z Inlets.

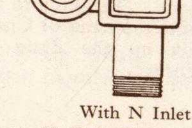


With Y and Z Inlets.

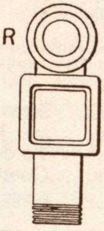


With X, Y and Z Inlets.

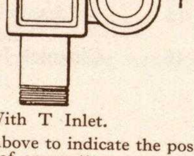
BENT (VERTICAL) INLETS.



With N Inlet.



With R Inlet.



With T Inlet.

The letters X, Y, Z, N, R and T can be used as shown above to indicate the positions and type of inlets on square gullies of any pattern.

GLAZED STONEWARE CHANNELS

CHANNEL BENDS—ORDINARY.

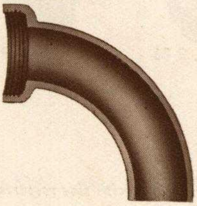


Fig. SC 19

Made in various sweeps — either hand, as *full* ordinary bends on page 21.

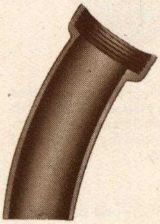


Fig. SC 16

N.B.—To determine hand, look *up* the drain *from* spigot *to* socket. In ordering, quote Ref. No. of full bend, prefix with SC, and state hand required.

HALF SECTION CHANNEL JUNCTIONS.

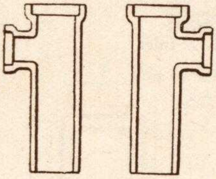


Fig. SC 37.

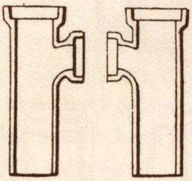


Fig. SC 38.

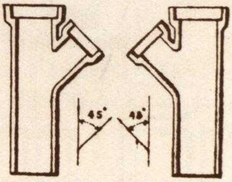


Fig. SC 39.

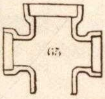


Fig. SC 42.

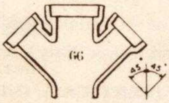


Fig. SC 41

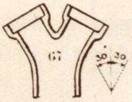


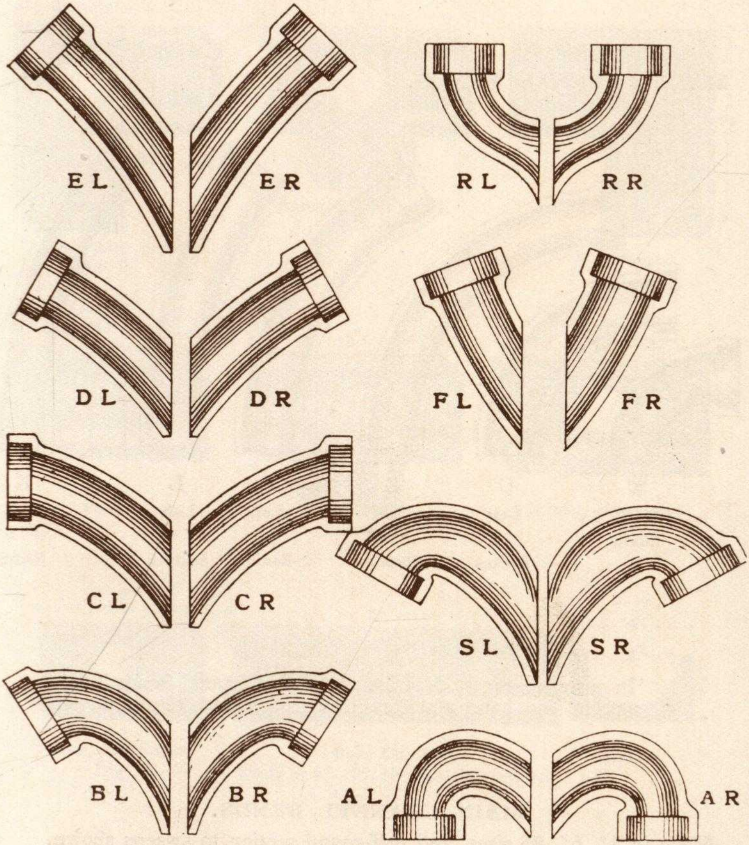
Fig. SC 46.

Half-section Channel Junctions made as in full Junctions on page 23.
In ordering, quote Ref. No. of full Junction, prefix with SC, and state hand required.

Fig. SC. 19/16 SC. 37/46	Ordinary Half Round Channel Bends and Channel Junctions.	Sizes and lengths as in full Bends and Junctions. Weights pro ratio. To determine the hand of Channel Goods look *up* the drain *from* spigot *to* socket.

GLAZED STONEWARE CHANNELS

BENDS FOR JUNCTION WITH STRAIGHT CHANNELS.



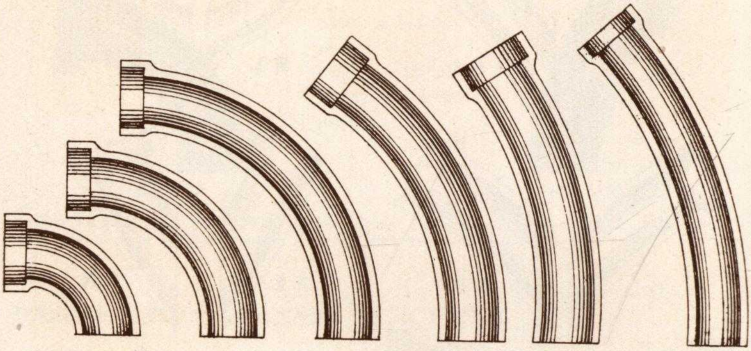
SUPPLIED IN HALF OR THREE-QUARTER SECTION,
in 4″ and 6″ Diameters.

IN WINSER OR BARRON'S PATTERN.

In ordering, please state size, section, quote above key letters, and whether required in Salt-glaze or White-glaze.

GLAZED STONEWARE CHANNELS

MAIN CHANNEL BENDS.



W
Left
Elbow

U
Left
1′ 2″
Radius

S
Left
1′ 6″
Radius

R
Left
2′
Radius

L
Left
2′ 9″
Radius

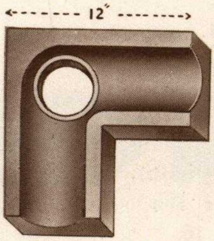
X
Left
4′ 0″
Radius

In ordering, please describe as "Main Channel Bends," stating size, hand and key letter of sweep required.

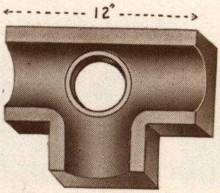
MAIN CHANNEL BENDS.

Made in 4″, 6″, 9″ sizes, and half-round section to sweeps shown.

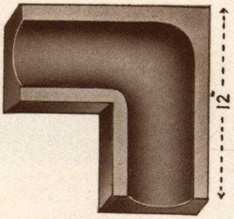
BLOCK CHANNELS



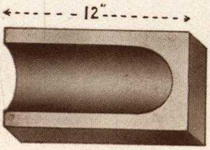
Angle, with outlet.
Fig. 6.



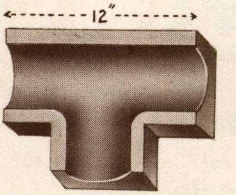
Junction, with outlet.
Fig. 8.



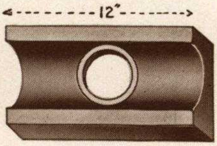
Plain Angle.
Fig. 5.



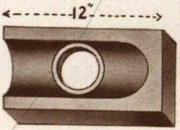
Stop.
Fig. 2.



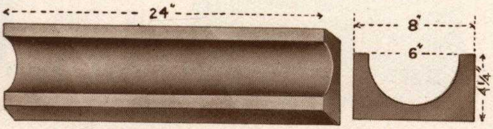
Junction.
Fig. 7.



Channel, with outlet.
Fig. 4.



Stop, with outlet.
Fig. 3.



Plain Channel.
Made in 6", 12", 18", and 24" lengths.

Section

Fig. 1.

In ordering, please describe as "Block Channel," quoting key number and size required.

BLOCK CHANNELS.

Supplied in *White Glaze,* 6" diameter, as shown.

GLAZED STONEWARE

Figs.

PIG TROUGHS.

S 83/85	No. 1	Single	Size 18″ × 11″
	No. 2	Double	Size 24″ × 18″
	No. 3	Treble	Size 36″ × 18″

CATTLE TROUGHS (Plain).

	Size	No. per Ton
S 86/87	24″ × 18″ × 10″	16
	27″ × 18″ × 10″	14
	30″ × 18″ × 10″	12
	33″ × 21″ × 12″	9
	48″ × 24″ × 12″	4
	48″ × 24″ × 15″	3

Do. (Special Sloping Sides)

28″ × 22″ — 15″ × 10″

SC 87a 13½″ × 13″ Top 12″ × 12″ Base × 7½″ deep.

Fig. S 88. CORNER HORSE MANGER.

Small. 18″ Sides × 10″ Deep.
Large. 24″ Sides × 10″ Deep.

Fig. S 89. CAKE TROUGHS, RECTANGULAR.

Size	No. per Ton
12″ × 12″ × 7″	60
15″ × 12″ × 8″	40
18″ × 15″ × 8″	25
18″ × 12″ × 11″	25

Fig. S 90. CAKE TROUGH, ROUND.

14″ Diameter × 8″ Deep

GLAZED STONEWARE

PIG AND CATTLE TROUGHS, MANGERS, Etc.

PIG TROUGHS.

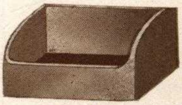


Fig. S 83

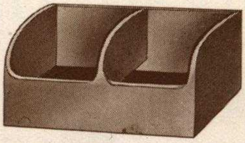


Fig. S 84

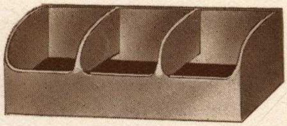


Fig. S 85

CATTLE TROUGHS.

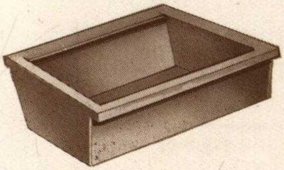


Fig. SC 86

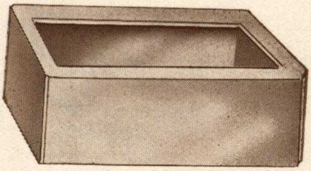
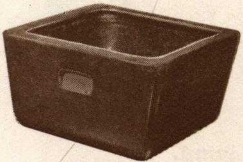


Fig. SC 87

CATTLE TROUGH



SC 87 A

CORNER HORSE MANGER.

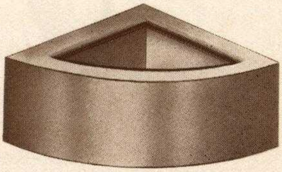


Fig. SC 88

CAKE TROUGHS.

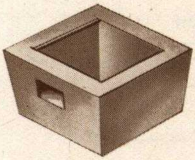


Fig. S 89

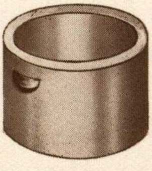


Fig. S 90

GLAZED STONEWARE GOODS

continued.

HALF-ROUND MANGER LININGS.

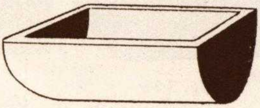


Fig. S 91

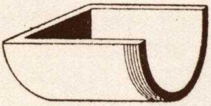


Fig. S 92

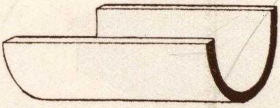


Fig. S 93

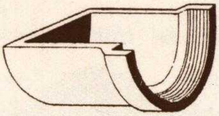


Fig. S 94

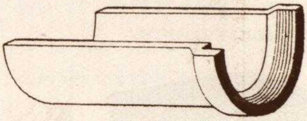


Fig. S 95

Half-Round Manger Lining.

Figs. S 91/95 Made in sizes 12″, 15″, 18″, with or without sockets and stop end, to order.

No. Yards per Ton		
12″	15″	18″
25	16	12

AGRICULTURAL LAND DRAIN TILES

THESE are made principally at our Danby Works, and large stocks are kept on hand in sizes, 2½″ 3″, 4″ and 6″, these being mostly enquired for. Other sizes will be gladly quoted for and made to specification.

The following Tables may be helpful to those estimating the cost of draining land.

Table showing No. of 12″ long Pipes required to drain one Acre.

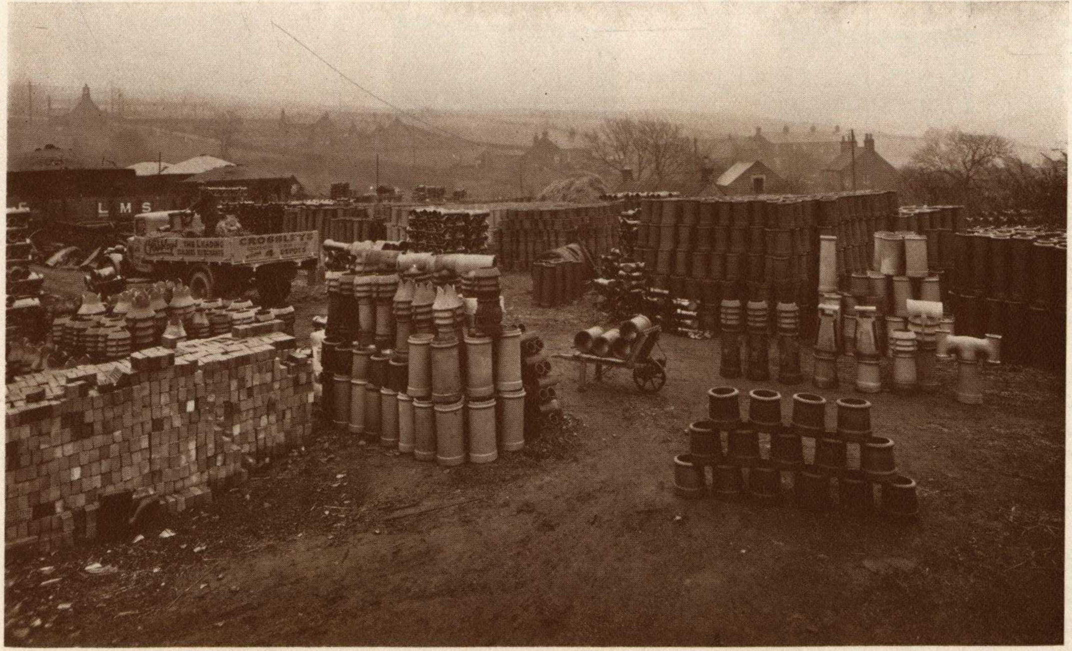
Drains Apart	No.	Drains Apart	No.	Drains Apart	No.	Drains Apart	No.
Ft. Ins.		Ft. Ins.		Ft. Ins.		Ft. Ins.	
3 0	14,520	12 0	3,630	24 0	1,815	39 0	1,117
4 0	10,890	13 6	3,227	25 6	1,708	42 0	1,037
4 6	9,680	15 0	2,804	27 0	1,613	45 0	968
6 0	7,260	16 6	2,640	28 6	1,529	48 0	908
7 0	6,223	18 0	2,420	30 0	1,452	50 0	871
8 0	5,445	19 6	2,234	31 6	1,383	..	..
9 0	4,840	21 0	2,074	33 0	1,320	..	..
10 0	4,356	22 6	1,936	36 0	1,210	..	..

Table Showing Weights per 1,000 and Area per Pipe.

SIZE	2½″ Int. Dia.	3″ Int. Dia.	4″ Int. Dia.	6″ Int. Dia.
Weight per 1000	Tons Cwts. 1 13	Tons Cwts. 2 3	Tons Cwts. 3 7	Tons Cwts. 5 3
Area per Pipe in Sq. Ins.	4·908	7·068	12·566	28·277

PRICES per 1,000 lin. feet quoted to any point, per road or rail.

MOULDED TERRA COTTA GOODS



VIEW OF CHIMNEY POT STOCK.

MOULDED TERRA COTTA GOODS.

Goods in this section are all hand-moulded, including Chimney Pots in red and buff terra cotta or salt-glazed ware.

TERRA COTTA CHIMNEY POTS

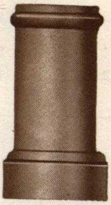
continued.

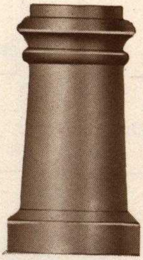
No.	Height	Stock Colour	Base Dimens.	No. per Ton	" S " denotes made to order only
1	1′6″	Buff	12″ Diam.	68	—
1	2′0″	Buff	12″ Diam.	52	—
2	2′6″	Buff	14½″ Diam.	28	S
3	2′0″	Buff and Red	11½″ Diam.	40	S
4	2′3″	Buff and Red	12½″ Diam.	40	—
5	2′3″	Buff and Red	12″ Diam.	46	—
6	1′9″	Buff	13″ × 13″	28	S
7	3′0″	Buff	14½″ Diam.	25	S
8	1′0″	Buff and Red	12″ Diam.	94	S
8	1′3″	Buff and Red	12″ Diam.	75	S
9	2′0″	Buff	12½″ × 12½″	45	—
10	1′9″	Buff	13½″ × 13½″	38	—
11	2′4″	Buff	12″ × 12″	28	—
12	2′3″	Buff	13½″ × 13½″	30	S

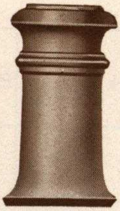
All pots can be made in Red, Buff, or Glaze, as may be required.

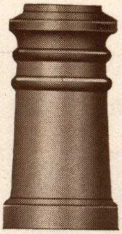
Pots other than those marked " S " are made regularly and stocked.

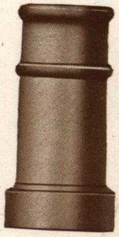
TERRA COTTA CHIMNEY POTS

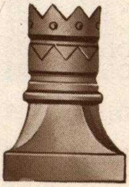

CP 1
Height, 2′ & 1′ 6″

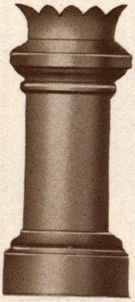

CP 2
2′ 6″

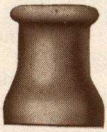

CP 3
2′ 0″

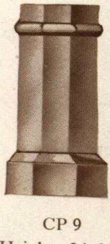

CP 4
2′ 3″

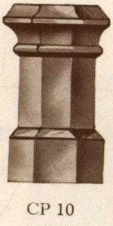

CP 5
Height 2′ 3″

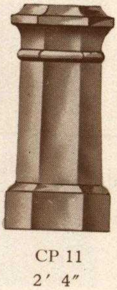

CP 6
1′ 9″

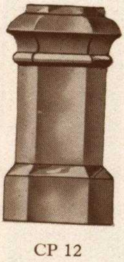

CP 7
3′ 0″


CP 8
1′ 0″ & 1′ 3″


CP 9
Height, 2′ 0″


CP 10
1′ 9″


CP 11
2′ 4″


CP 12
2′ 3′

TERRA COTTA CHIMNEY POTS

continued.

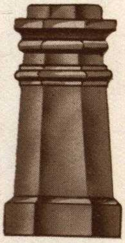
No.	Height	Stock Colour	Base Dimens.	No. per Ton	" S " denotes made to order only
13	2′6″	Buff	15″ ×15″	35	S
13	2′10″	Buff	15″ ×15″	25	S
14	3′0″	Buff	15″ ×15″	18	S
15	1′0″	Red	10½″Diam.	107	—
15	1′6″	Red	10½″Diam.	80	—
15	2′0″	Red	11″ Diam.	59	—
16	1′0″	Buff and Red	11″ ×11″	80	—
16	1′3″	Buff and Red	12″ ×12″	60	—
17	1′3″	Buff	12″ ×12″	68	S
18	1′6″	Buff	12″ ×12″	58	S
19	1′9″	Buff	12″ ×12″	38	S
20	1′6″	Buff and Red	13″ ×13″	41	—
20	2′0″	Buff and Red	13″ ×13″	28	—
21	2′6″	Buff and Red	13½″×13½″	27	S
22	1′9″	Buff	13″ Diam.	47	—
23	3′3″	Buff	14″ Diam.	26	—
	3 Louvre—1 piece				
23	4′3″	Buff	14″ Diam.	19	—
	4 Louvre—2 piece				
23	4′6″	Buff	14″ Diam.	18	—
	5 Louvre—2 piece				
24	4′0″	Buff	—	20	—

All Pots can be made in Red, Buff, or Glaze, as may be required.

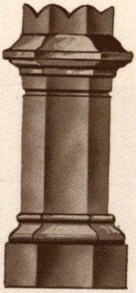
Pots, other than those marked " S " made regularly and stocked.

TERRA COTTA CHIMNEY POTS

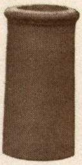
continued.



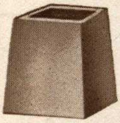
CP 13
2′6″ & 2′10″



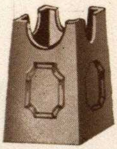
CP 14
3′0″



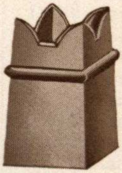
CP 15
1′0″ 1′6″ & 2′0″



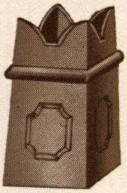
CP 16
1′0″ & 1′3″



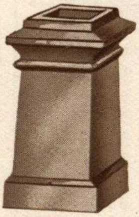
CP 17
1′3″



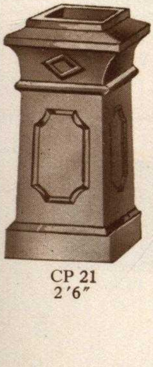
CP 18
1′6″



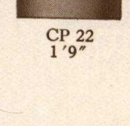
CP 19
1′9″



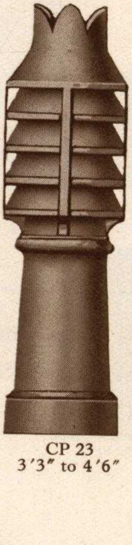
CP 20
2′0″ & 1′6″



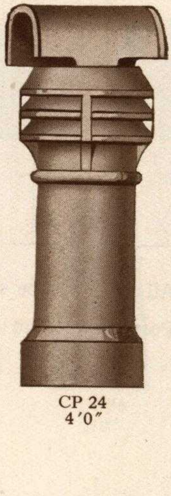
CP 21
2′6″



CP 22
1′9″



CP 23
3′3″ to 4′6″



CP 24
4′0″

TERRA COTTA CHIMNEY POTS

continued.

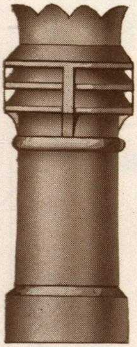
No.	Height	Stock Colour	Base Dimens.	No. per Ton	"S" denotes made to order only
25	2'10"	Buff	13" Diam.	31	—
25	3'6"	Buff	14½" Diam.	25	—
26	3'0"	Buff	13" Diam.	34	—
27	4'0"	Buff	14" Diam.	17	—
28	3'3"	Buff	14" Diam.	21	S
29	3'0"	Buff	12" Diam.	25	—
30	2'3"	Red	11½" Diam.	47	—
30	3'6"	Red	12" Diam.	26	—
30	5'0"	Red	13" Diam	21	—
31	1'3"	Red	11" Diam.	93	—
31	1'6"	Red	13½" Diam.	80	—
31	2'6"	Red	13½" Diam.	40	—
32	1'2"	Red	12" Diam.	75	S
33	1'1"	Red	13" Diam.	90	—
34	1'6"	Red	12" Diam.	70	S
35	2'0"	Red	13" Diam.	60	S
36	2'0"	Red	12" Diam.	62	S

All Pots can be made in Red, Buff, or Glaze, as may be required.

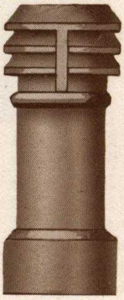
Pots, other than those marked "S," made regularly and stocked.

TERRA COTTA CHIMNEY POTS

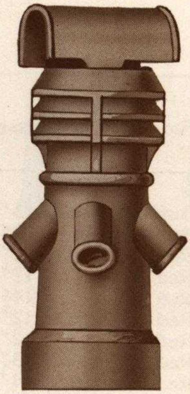
continued.



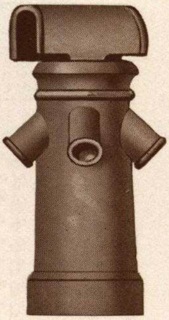
CP 25
3′6″ & 2′10″



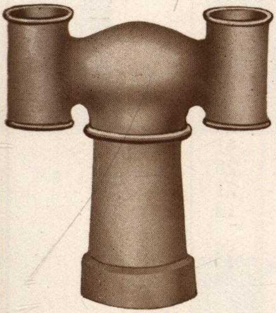
CP 26
3′0″



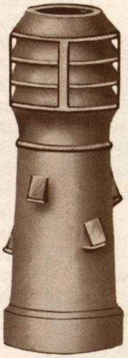
CP 27
4′0″



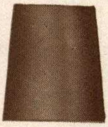
CP 28
3′3″



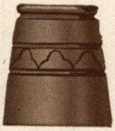
CP 29
3′0″



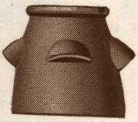
CP 30
2′3″ 3′6″ & 5′0″



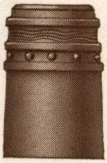
CP 31
1′3″ to 2′6″



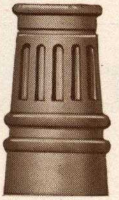
CP 32
1′2″



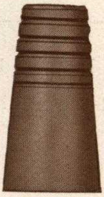
CP 33
1′1″



CP 34
1′6″



CP 35
2′0″



CP 36
2′0″

TERRA COTTA CHIMNEY POTS

continued.

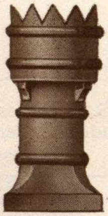
No.	Height	Stock Colour	Base Dimens.	No. per Ton	" S " denotes made to order only
37	2′3″	Buff and Red	13″ × 13″	40	—
37	2′6″	Buff and Red	13″ × 13″	36	—
38	1′6″	Red	11″ × 9″	50	S
39	1′6″	Red	12″ × 12″	50	S
40	1′6″	Red	14½″ × 14½″	54	S
41	1′6″	Red	12″ Diam.	80	—
41	2′0″	Red	12″ Diam.	51	—
41	5′0″	Red	13″ Diam.	17	—
41	6′0″	Red	14″ Diam.	15	—
42	1′0″	Red	12″ Diam.	80	—
42	1′6″	Red	12″ Diam.	62	—
42	2′0″	Red	12″ Diam.	50	—
43	1′4″	Red	12″ Diam.	75	—
44	1′7″	Red	12″ Diam.	65	—
45	1′7″	Red	12″ Diam.	65	—
46	1′0″	Buff and Red	11″ Diam.	90	—
46	1′3″	Buff and Red	11″ Diam.	80	—
46	1′6″	Buff and Red	11″ Diam.	70	—
46	2′0″	Buff and Red	12″ Diam.	56	—
46	2′6″	Buff and Red	12″ Diam.	50	—
46	3′0″	Buff and Red	12½″ Diam.	41	—
46	4′0″	Red	12½″ Diam.	28	—
46	5′0″	Red	13″ Diam.	21	—
46	6′0″	Red	13½″ Diam.	18	—
	(In one piece or two 3′ 0″ parts)				
47	2′0″	Red	11½″ Diam.	55	S
48	2′6″	Red	13″ × 13″	35	S

All Pots can be made in Red, Buff, or Glaze, as may be required.

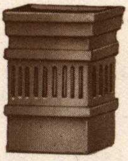
Pots, other than those marked " S," made regularly and stocked.

TERRA COTTA CHIMNEY POTS

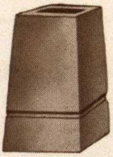
continued.



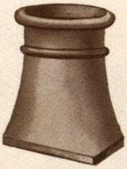
CP 37
2′3″ & 2′6″



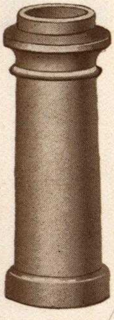
CP 38
1′6″



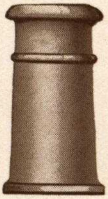
CP 39
1′6″



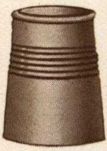
CP 40
1′6″



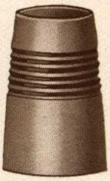
CP 41
1′6″ to 6′0″



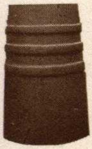
CP 42
1′0″ to 2′0″



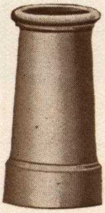
CP 43
1′4″



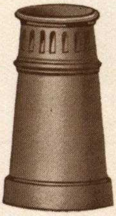
CP 44
1′7″



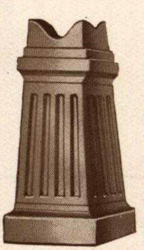
CP 45
1′7″



CP 46
1′0″ to 6′0″



CP 47
2′0″



CP 48
2′6″

TERRA COTTA CHIMNEY POTS

continued.

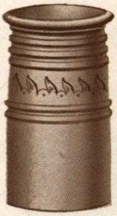
No.	Height	Stock Colours	Base Dimens.	No. per Ton	" S " denotes made to order only
49	2 ′0″	Red	12″ Diam.	50	S
50	2 ′3″	Red	12½″ Diam.	40	S
50	3 ′0″	Red	12½″ Diam.	28	S
51	2 ′3″	Red	11½″ Diam.	45	S
52	2 ′6″	Red	12½″ Diam.	35	S
53	1 ′8″	Red	15½″ Diam.	45	S
54	4 ′0″	Glaze	13″ Diam.	13	—

All Pots can be made in Red, Buff, or Glaze, as may be required.

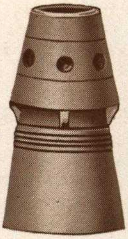
Pots, other than those marked " S," made regularly and stocked.

TERRA COTTA CHIMNEY POTS

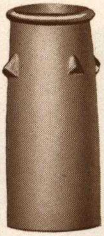
continued.



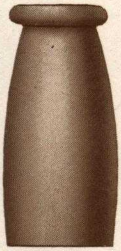
CP 49
2′0″



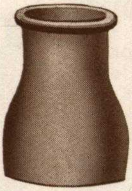
CP 50
2′3″ & 3′0″



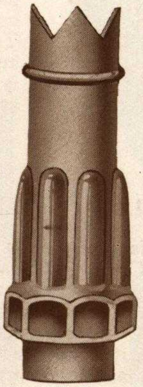
CP 51
2′3″



CP 52
2′6″

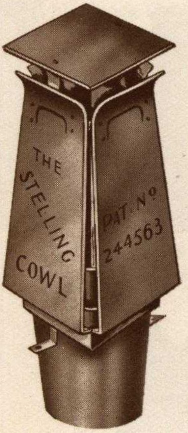


CP 53
1′8″



CP 54
4′0″

THE "STELLING" PATENT DOWNDRAUGHT CURE



"STELLING" COWL

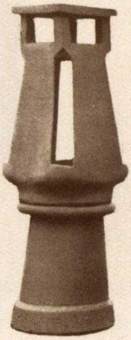
THE "STELLING" COWL is well constructed of 20 Gauge Iron, galvanized *after* manufacture. *This was the first guaranteed preventative of down draught* in this Country.

Having a tapered base it is easily fixed into the average existing chimney pot. It has no moving parts which will either quickly wear out, or become noisily objectionable. There are no louvres to soot up and cause inefficiency, and there is no obstruction in the Cowl to a sweep's brush.

"STELLING" CHIMNEY POT

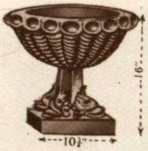
THIS is a terra-cotta reproduction of the Cowl, and is a two-piece unit consisting of a base and top. It can be had in red, buff, or salt-glazed ware, the life of which is everlasting. As in the Cowl, it is necessary to face one of the corner apertures directly to the wind which causes the chimney to smoke, to obtain best results.

Our Agents in most parts of the United Kingdom carry stocks of these Cowls and Pots. Should you not be able to procure locally, please write to us direct.

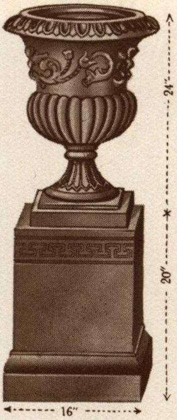


TERRA COTTA GARDEN WARE

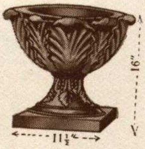
VASES, PEDESTALS, AND GARDEN EDGING.



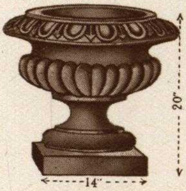
No. 4 V



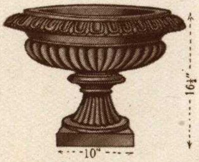
No. 2 VP



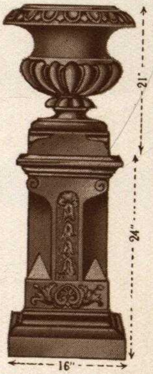
No. 5 V



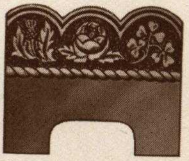
No. 6 V



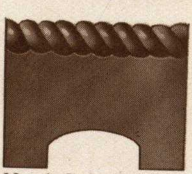
No. 7 V



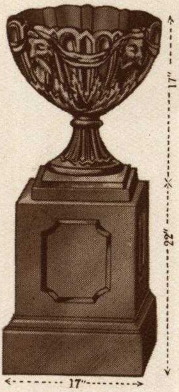
No. 1 VP



No. 2 Garden Edging



No. 1 Garden Edging



No. 3 VP

All Vases and Pedestals made in Red and Buff. Garden Edging stocked in Salt Glaze, but made in red or buff to order.

HAND
MODELLED
COMMONDALE
WARE.

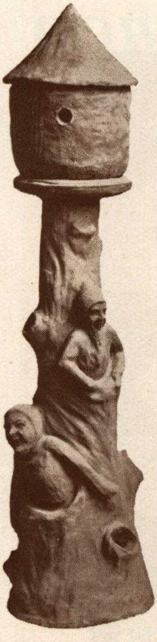
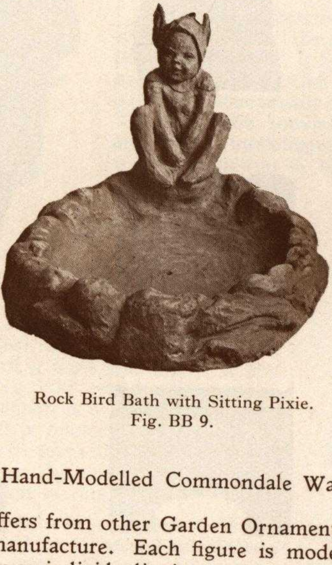


Fig. N1 S3



Rock Bird Bath with Sitting Pixie.
Fig. BB 9.

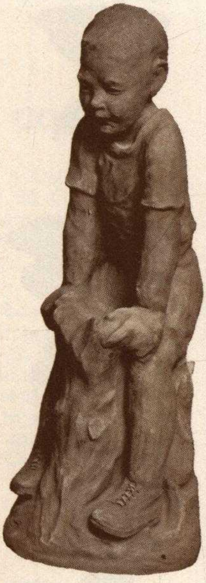


Fig. BB 11

Hand-Modelled Commondale Ware.

THIS Ware differs from other Garden Ornaments, as no moulds are used in its manufacture. Each figure is modelled by hand from solid clay, ensuring an individuality impossible to obtain in any other way.

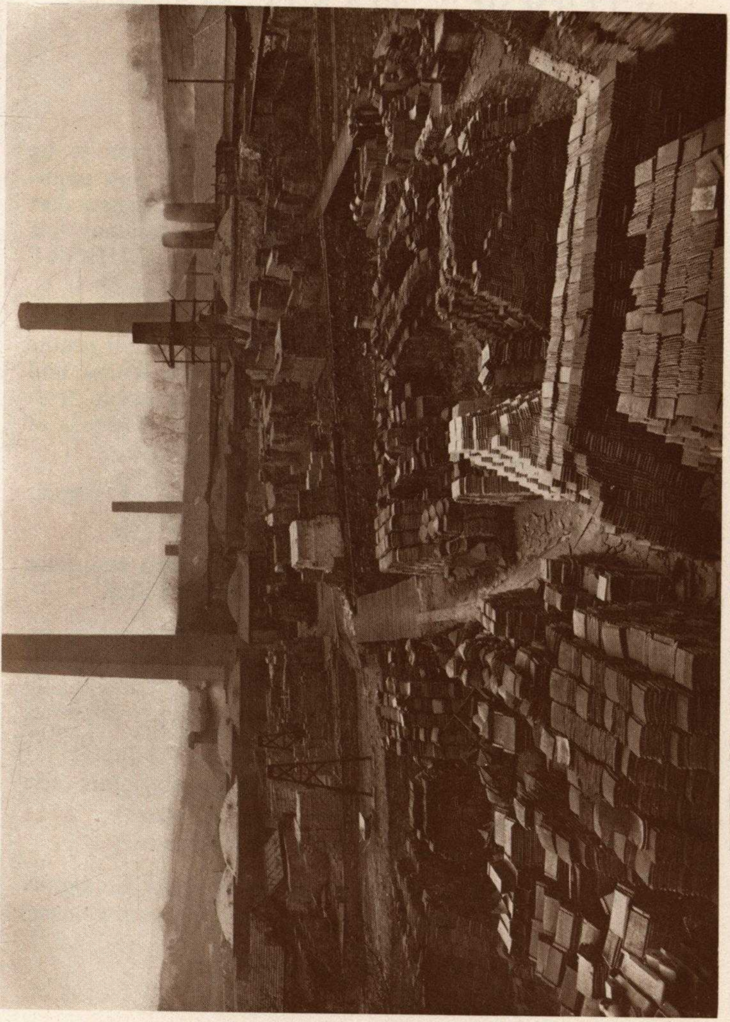
Similarly, in this Ware, we are not restricted to set sizes of subjects.

Please ask for separate brochure and price list.

SECTION III.

BRICKS

HAND-MADE . MACHINE-MADE . FACING . COMMON



VIEW OF BRICK STOCK, COMMONDALE WORKS.

BRICKS

"TUDOR" HAND-MADE SAND FACINGS

PROBABLY the first hand-made sand-faced bricks to be produced in the Northern Counties, they have won popularity wherever they have been used. From a very modest beginning we can now point with justifiable pride to many fine buildings throughout the country faced with "TUDOR" Bricks.

A unique feature about them is the wide range of colours in which they are produced, all of which are the natural results of the mixing of various clays at our Commondale Works, and burning at temperatures which would not be possible with other clays. Faithful Colour Photographic Plates of panels of these bricks appear on papes 75 to 85 of this Catalogue.

Stains are never used, unless a colour outside our regular range and impossible to produce otherwise, is asked for.

Owing to their extremely low porosity, and high resistance to thrust, they are very suitable for use on exposed sites.

On account of the fact that these bricks are hand-made, and not mass produced in a machine, each separate contract entrusted to us for supplies can be more or less individually dealt with, as far as satisfying requirements on such points as fineness or roughness of texture, colour and size.

Although we stock standard thicknesses, any other size desired can be made to specification.

For Fireplace Briquettes, please ask for Fireplace Catalogue.

BRICKS—*continued.*

"TUDOR" HAND-MADE SAND FACINGS

STOCK COLOURS.

(*See Colour Plates, pages* 75 to 85).

Red
Red Mottles (Including Reds Browns, Light & Blue Brindle)
Cream Buff
Brindle Buff
*Sandy Buff
Heather Brown
Golden Brown
*Silver Grey

STOCK SIZES AND WEIGHTS.

9″ × 4¼″ × 2″ weigh 2 Tons 5 Cwts. per 1,000
9″ × 4¼″ × 2¼″ weigh 2 Tons 10 Cwts. per 1,000
9″ × 4¼″ × 2⅝″ weigh 3 Tons 0 Cwts. per 1,000
*9″ × 4¼″ × 2⅞″ weigh 3 Tons 10 Cwts. per 1,000
9″ × 4¼″ × ⅞″—Roman Tiles
6″ × 3″ × ⅝″—Slips
6″ × 3″ × 1½″—Fireplace Briquettes
(*See Separate Catalogue*).

**Made to order only.*

Airbricks made to course with any of the above sizes.

Copy of mean result of tests carried out by Messrs. David Kirkaldy & Son, 99 Southwark Street, London, S.E.1., to ascertain the resistance to thrust and porosity of Crossley's "TUDOR" hand-made sand-faced Bricks :—

Cracking Load . . 286·1 Tons per sq. foot
Crushing Load . . 316·4 Tons per sq. foot
Absorption Per Cent. . . 3·05.

A full copy of six different tests to ascertain the above mean figures will be supplied on request.

"TUDOR" HAND-MADE SAND FACINGS SPECIALS

WHILE the general practice is for Architects to design and define the sizes of the special bricks they may use, we are repeatedly asked for our standard splays, cills and the like.

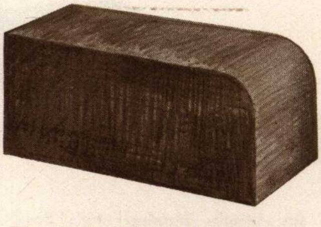
In the following pages we illustrate a range of such specials.

All of these are either kept in stock or could be quickly made in stock colours and thicknesses.

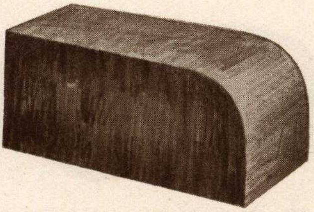
We would say, however, that it is a pleasure to us to work to individual designs at all times, and we will be glad to give prices on receipt of enquiry and drawings.

Broadly speaking, the production of specials takes from four to seven weeks from the time of ordering, according to size and quantities required.

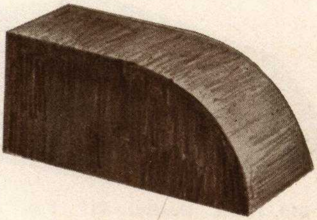
BRICKS



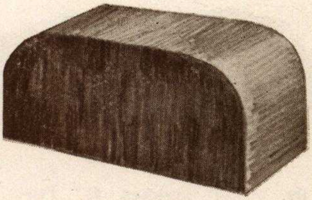
B1. Single Bull Nose, **1¼"** Radius



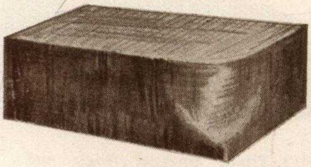
B2. Single Bull Nose, **2¼"** Radius



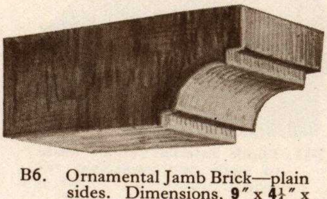
B3. Single Bull Nose, **4½"** Radius



B4. Double Bull Nose, **2¼"** Radius —also made **1⅛"** and **4½"** Radius.

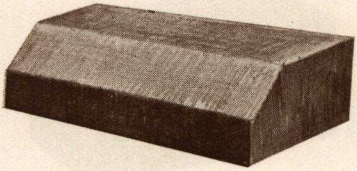


B5. Bull Nose Stop, **2¼"** Radius —also made **1⅛"** and **4½"** Radius.

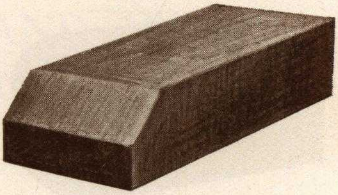


B6. Ornamental Jamb Brick—plain sides. Dimensions, **9"** x **4¼"** x **6¼"** x required thickness.

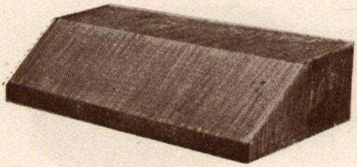
BRICKS



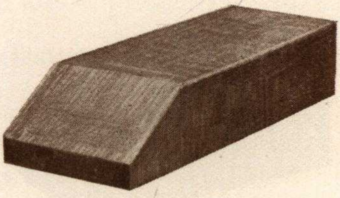
B7. Plinth Stretcher, **1½″** Projection.



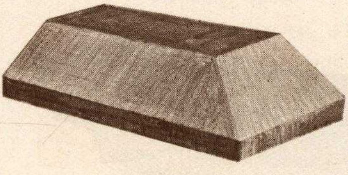
B8. Plinth Header, **1½″** Projection.



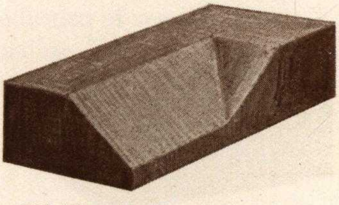
B9. Plinth Stretcher, **2¼″** Projection.



B10. Plinth Header, **2¼″** Projection.

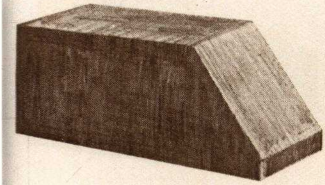


B11. Plinth External Angle—made to angle and projection required.

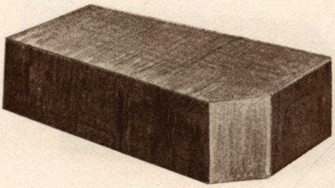


B12. Plinth Internal Angle and Stop—made to angle and projection rcquired.

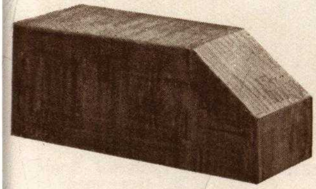
BRICKS



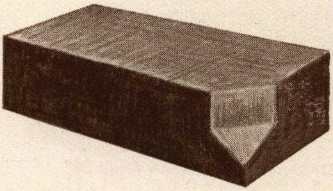
B13. 60° Splay—made as shewn or to required measurement on splay



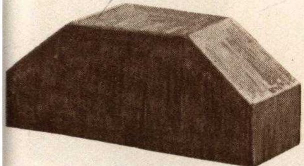
B14. 45° Splay—1⅛″ Splay or to required measurement.



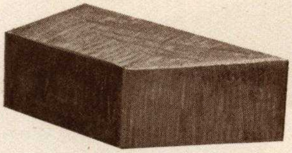
B15. 45° Splay—2¼″ Splay or to required measurement.



B16. Splay Stop—made to work with any splay.

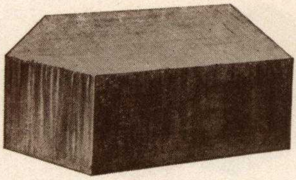


B17. Double Splay.

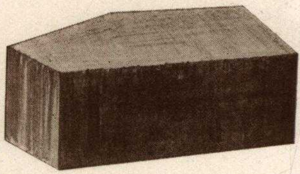


B18. Squint Quoin—made to any angle required, and bullnosed on return if required.

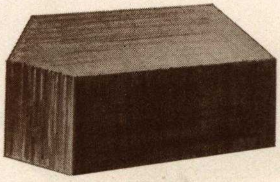
BRICKS



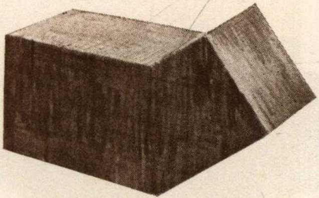
B19. Octagon or External Angle 45°



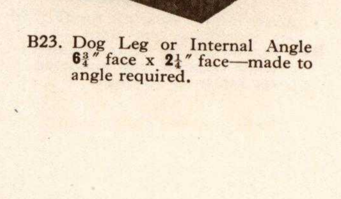
B20. Octagon or External Angle 60°



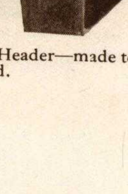
B21. Octagon or External Angle 30°



B22. Dog Leg or Internal Angle $4\frac{1}{2}$″ face x $2\frac{1}{4}$″ face—made to angle required.

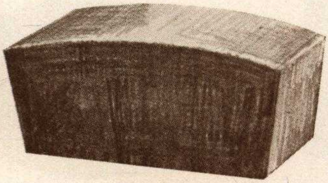


B23. Dog Leg or Internal Angle $6\frac{3}{4}$″ face x $2\frac{1}{4}$″ face—made to angle required.

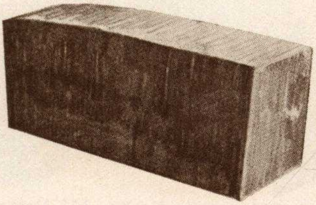


B24. Radius Header—made to radius required.

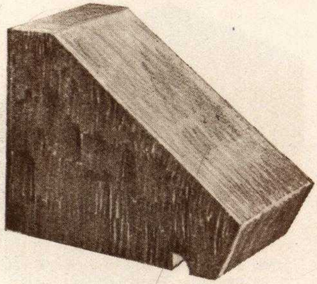
BRICKS



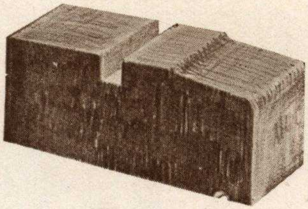
B25. Radius Stretcher—made to radius required.



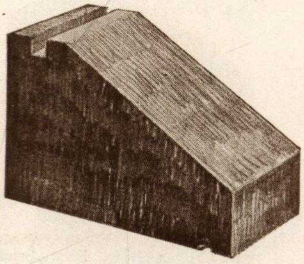
B26. Radius Stretcher, Part straight —for starting from straight to circular on plan work.



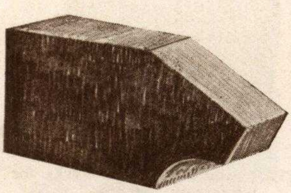
B27. Cill Brick. **1½**" Top x **7½**" Base x **8¼**" Deep x **9**" overall back to front x **2⅝**" wide face.



B28. Cill Brick **5⅞**" Top x **9**" Base x **4½**" Deep with **½**" Weathering.

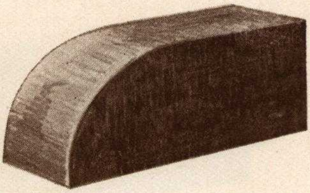


B29. Cill Brick **2¼**" Top x **8¼**" Base x **5¾**" Deep with **2¼**" Weathering.

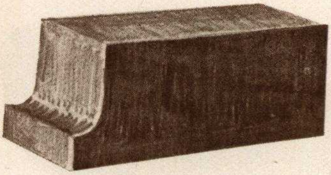


B30. Moulded String Brick, **4½**" Head x **5⅜**" Base x **4½**" Deep x **8⅜**" overall back to front

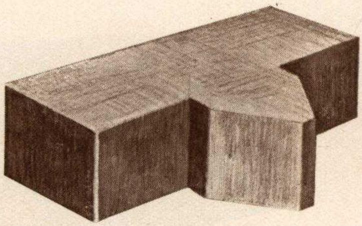
BRICKS



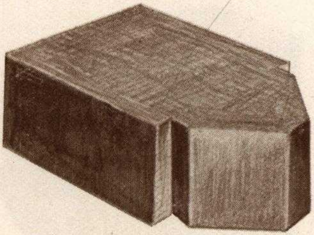
B31. Corona Header, 3¾″ Radius x **9″** Head x **4¼″** Deep.



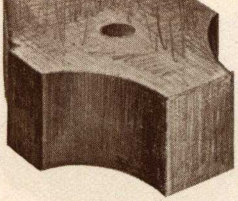
B32. Ovolo Header, **1⅛″** Radius.



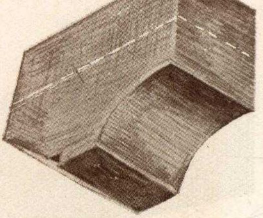
B33. Rib Mould Stretcher, **9″** x **6½″** overall.



B34. Rib Mould Header, **9″** x **4⅜″** overall.

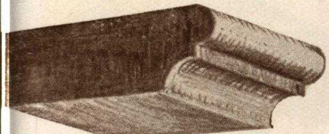


B35. Mullion Brick with hole for reinforcing bar, **9″** x **7½″** overall x **3″** wide face.

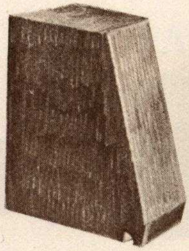


B36. Jamb Bricks (Bonding same mould as B36). First brick **9″** x **4¼″** overall. Bonding brick **9″** x **1⅞″** overall.

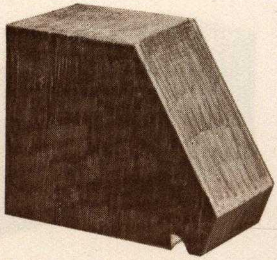
BRICKS



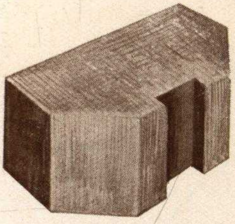
B37. Moulded String Brick **9″** Head x **7½″** Base x **3″** Deep with **1½″** Diameter O. G. mould.



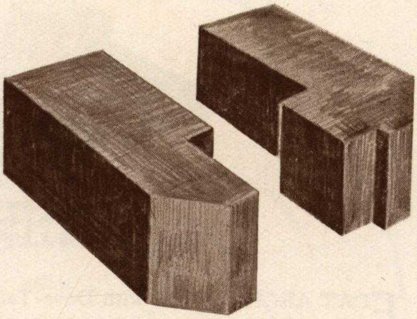
B38. Splayed Chimney Capping, **5″** Head x **7″** Base x **10″** Deep x **7½″** overall back to front.



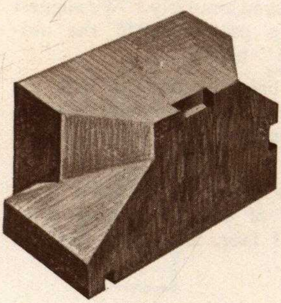
B39. Splayed Chimney Capping, **6″** Head x **10″** Base x **7½″** Deep x **10½″** overall back to front.



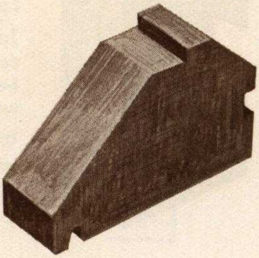
B40. Jamb Brick Header, with Internal and External Splayed Faces, grooved to take steel window frame, **7½″** x **4 5/16″** overall.



B42. }
B41. } Bonding Jamb Stretchers to work with B40.

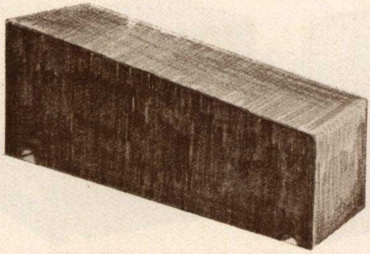


B43. Cill to Jamb Return, to work with B40, 41, 42 and 44.

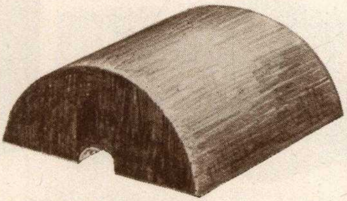


B44. Cill Brick to work with B40, 41, 42 and 43.

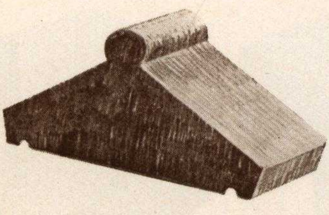
BRICKS



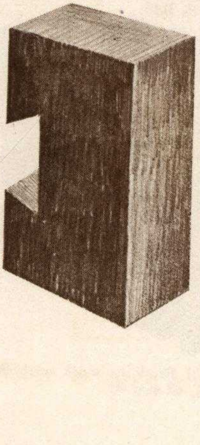
B45. Weathered Coping, throated both ends, **12″** long x **5″** to **4½″** Deep.



B46. Half Round Coping, **9″** x **9″** x **4½″** radius.



B47. Angular Coping, roll top, throated both sides, **11⅛″** Base x **6″** Deep x brick thickness.

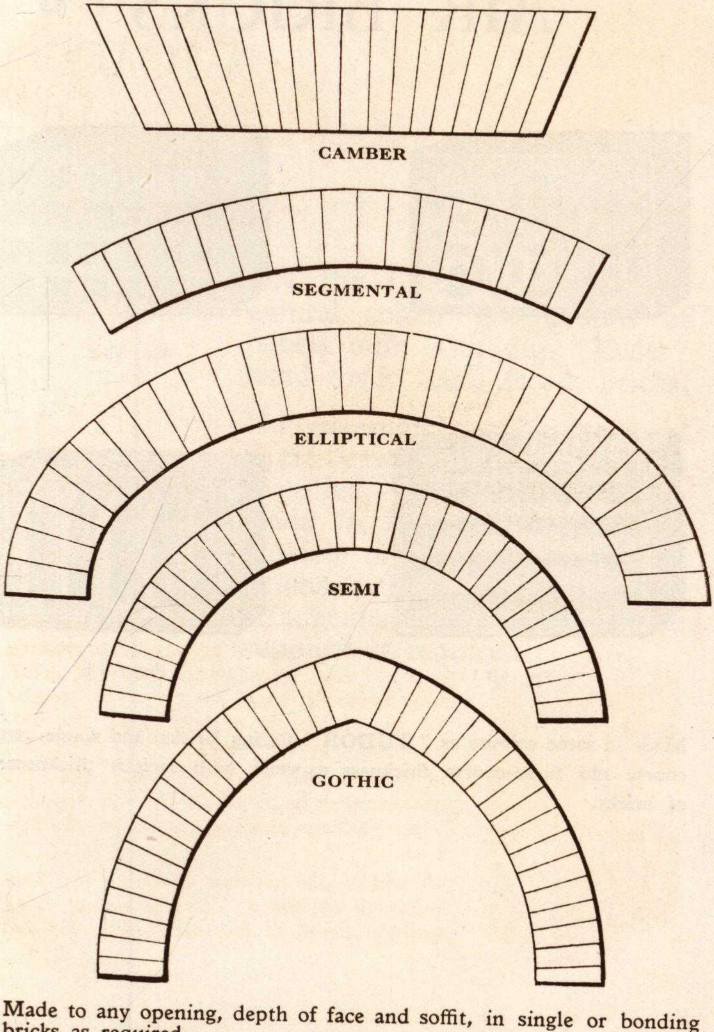


FLAT ARCH BRICK, with Dove-Tail Recess at back for reinforcing bar and cement grout—made in various sizes for coursing with different thicknesses of facings, or in bonding sizes to work with bonded face and soffit. Soffit bricks also keyed similarly. We suggest the use of this in preference to the old-fashioned "Holed" bricks.

In addition, this brick is easier to wall, the reinforcement being put in *after* the arch has been walled — resulting in more accurate work.

We will be glad to quote Architects for these bricks on receipt of enquiry stating brick opening, depth of face, and soffit desired.

ARCHES
IN "TUDOR" FACINGS



Made to any opening, depth of face and soffit, in single or bonding bricks as required.

AIR BRICKS

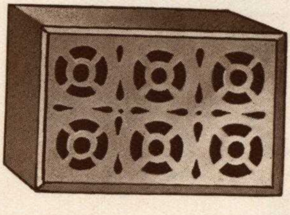


Fig. AB 1

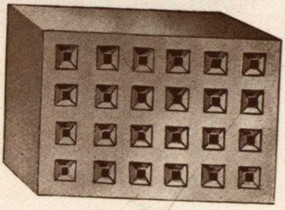


Fig. AB 2

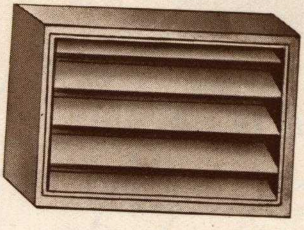


Fig. AB 3

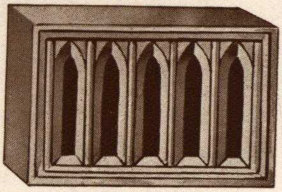


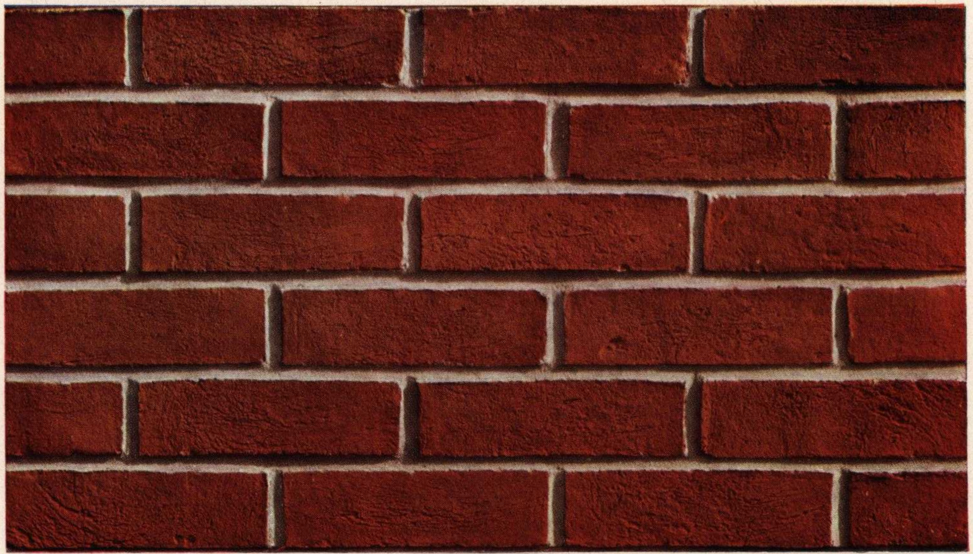
Fig. AB 4

Made in same colours as " TUDOR " Facing Bricks, and single, two-course and three-course thickness to work with various thicknesses of bricks.

"Tudor"
BRICK COLOUR PLATES

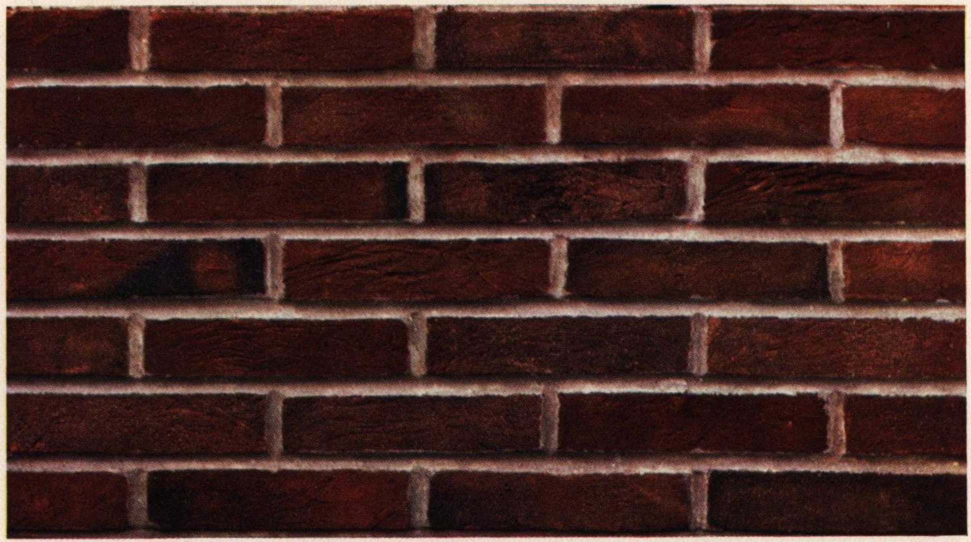
In the following pages are natural colour photographs of panels built with our "Tudor" hand-made sand-faced Bricks.

No guarantee can be made of their *exact* reproduction in supplies, but every effort is made to keep as faithfully as possible to these colours. Variations such as lighter or darker arrangements of shades can be supplied if required.



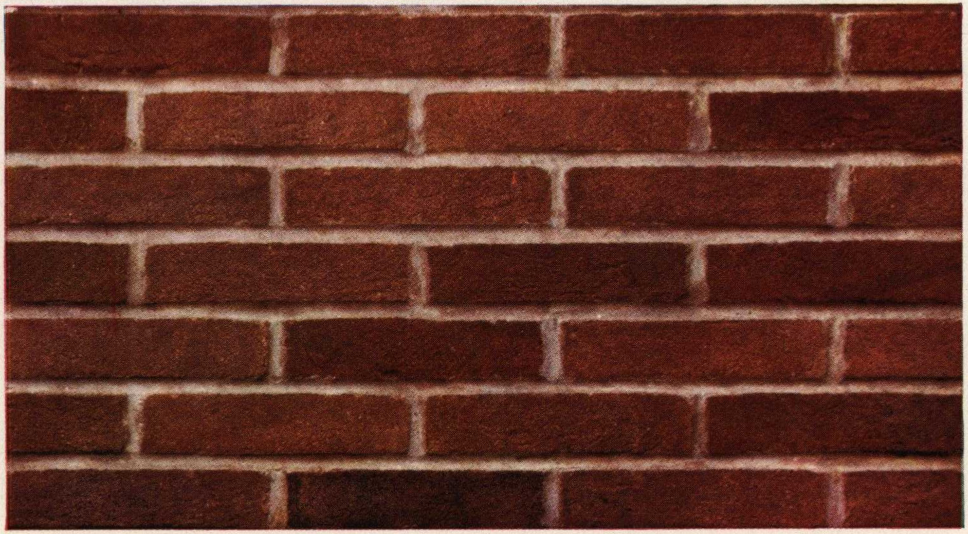
"TUDOR" HAND-MADE SAND FACINGS

Colour : **FINE SAND RED.**

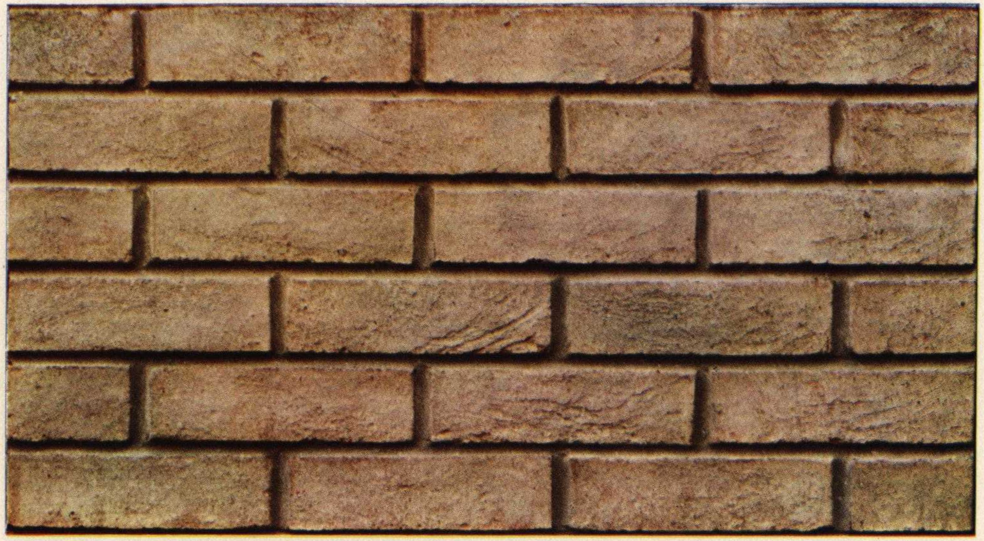


"TUDOR" HAND-MADE SAND FACINGS

Colour : **RED MOTTLE.**

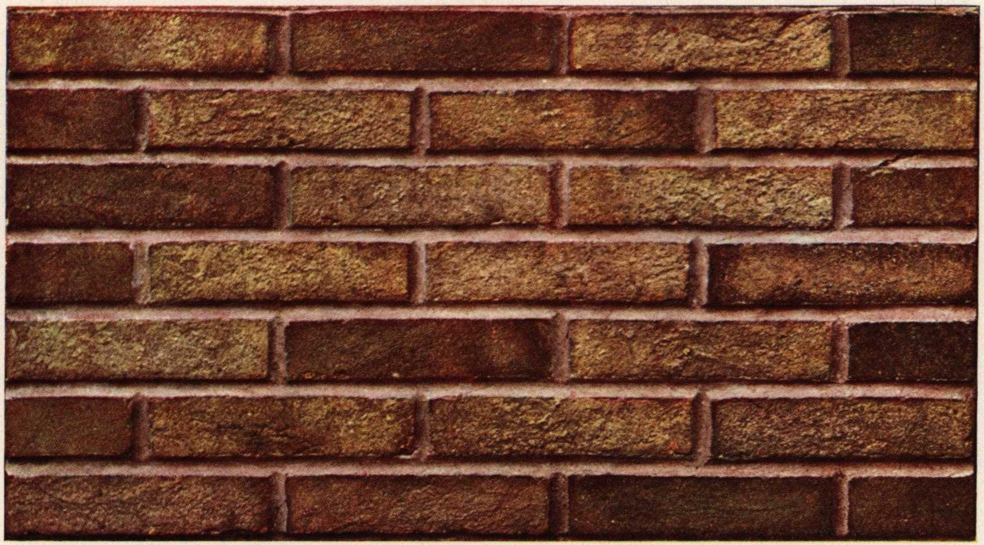


"TUDOR" HAND-MADE SAND FACINGS
Colour : **HEATHER BROWN.**



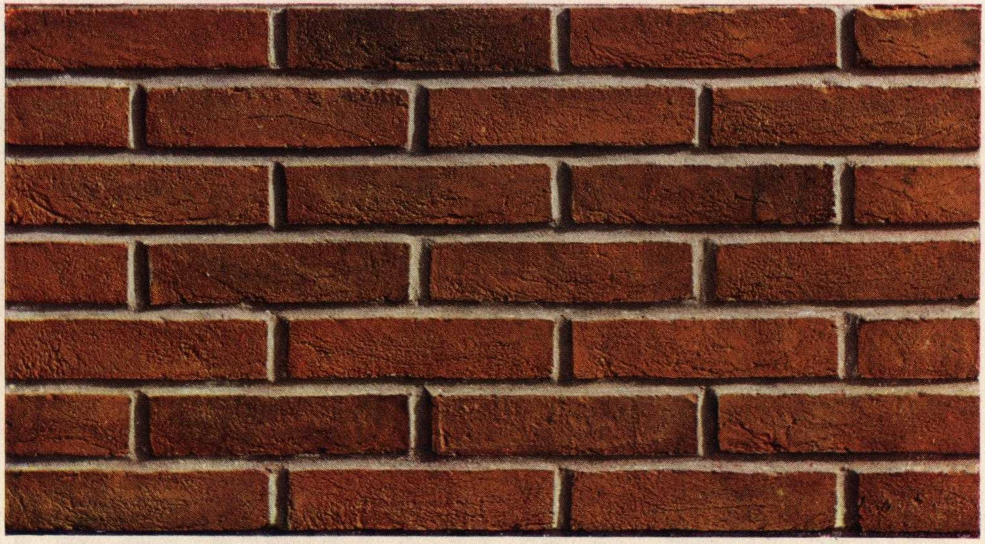
"TUDOR" HAND-MADE SAND FACINGS

Colour : **CREAM BUFF.**



"TUDOR" HAND-MADE SAND FACINGS

Colour : **BRINDLED BUFF.**



"TUDOR" HAND-MADE SAND FACINGS

Colour : **GOLDEN BROWN.**

A SHORT LIST OF CONTRACTS

Where "TUDOR" Facings have been used

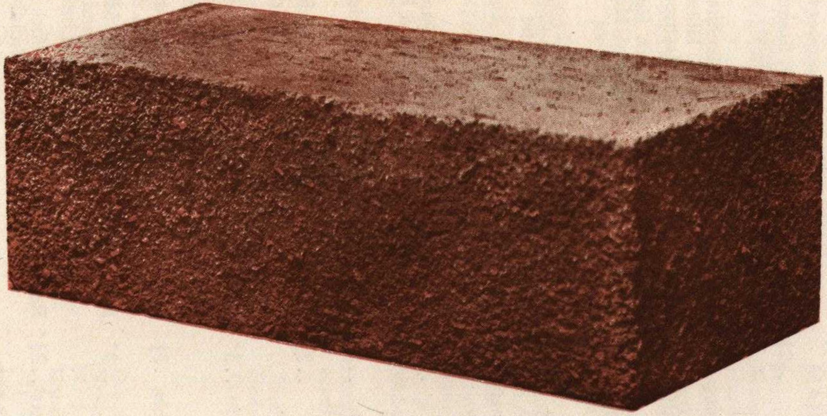
Contract	*Size and Colour of Brick*	*Architects*
Town Hall, BRIDLINGTON	2″ Red Mottles	Municipal Architect, Bridlington
Northstead Schools, SCARBOROUGH	2⅝″ Brindled Buff	Borough Engineer, Architect's Dept., Scarborough.
Clay Penny Mental Colony, EASINGWOLD.	2⅝″ Red Mottles	The County Architect, North Riding County Council.
Court Houses, NORTHALLERTON.	2⅝″ Fine Sand Red	The County Architect, North Riding County Council.
County Secondary School Gymnasium, WHITBY.	2⅝″ Fine Sand Red	The Architect to Education Dept., North Riding County Council
Grammar School, GUISBOROUGH.	2⅝″ Cream Buff	The Architect to Education Dept., North Riding County Council
Sir William Turner's School, Coatham, REDCAR.	2″ Fine Sand Red	R. R. Kitching & Co., Middlesbrough
Scalby U.D.C.Offices, SCALBY, Nr. Scarborough	2⅝″ Medium Red	Scalby U.D.C. Surveyor's Department
British Broadcasting Corporation, N.E. Transmitting Station STAGSHAW, Northumberland	3″ Sandy Buff	The Architects to the British Broadcasting Corporation, London.
Passenger Stations for United Bus Co. WHITLEY BAY	2½″ Golden Brown	Dixon & Bell, Newcastle
and MIDDLESBROUGH	2⅝″ Red Mottles	H. J. Starkey, Esq., London
Clothing Factory, MIDDLESBROUGH	2⅝″ Red Mottles	Messrs. Prices (Tailors) Ltd.. Architect's Dept., Leeds
MIDDLESBROUGH SCHOOLS:		
Brambles Farm	2½″ Cream Buff	Middlesbrough Education Committee, Architect's Dept.
Beechwood	2⅝″ Red Mottles	
Whinney Banks	2″ Brown Mottles	

"TUDOR" BRICK CONTRACTS—Continued

Contract	*Size and Colour of Brick*	*Architects*
County Council Schools, Lanchester	2½″ Cream Buff	Durham County Council Education Committee, Architect's Department
Wheatley Hill	2½″ Cream Buff	
Billingham	2½″ Cream Buff	
COUNTY DURHAM		
Newham Grange Schools, STOCKTON	2½″ Golden Brown	G. P. Stainsby, Esq., Stockton
Corporation Housing Schemes, MIDDLESBROUGH	2″ and 2⅝″ Fine Sand Red	The Architect to Municipal Housing Dept, Middlesbrough
Mental Colony at School Aycliffe for DURHAM COUNTY COUNCIL	2⅝″ Red, Red Mottles and Golden Brown	Taliesin Rees & Richard Holt, Liverpool
Church Assembly Hall, CARLISLE	2½″ Red 2½″ Cream Buff	F. A. Coyle, Esq., Newcastle
Hull Trawler Owners, Insurance Offices, HULL	2⅝″ Red Mottles	Walker, Son & Field, Hull
Leeds University Sports Pavilion, LEEDS	2″ Brindled Buff	Kitson, Parish, Ledgard & Pyman, Leeds
R.C. Schools and Presbytery, YORK	2″ Red & Red Mottles	J. P. Wilde, Esq., York
Kenton Lodge School Extensions, NEWCASTLE	2⅝″ Fine Sand Red	Newcastle Education Committee, Architect's Dept.
New Library, SUNDERLAND	3″ Reds	O. Mark, Esq., Architect to the Sunderland Education Dept.
Dame Allen Schools, NEWCASTLE	2½″ Golden Brown	Cackett, Burns Dick & Mackellar, Newcastle
New Hangars, R.A.F. Station, THORNABY	3″ Red Mottles	The Air Ministry, Works and Buildings Dept., London
Officers' & Soldiers' Quarters, etc., CATTERICK CAMP	2⅝″ Red Mottles	War Office, Works and Buildings Dept., London

In addition, many private residences, modern Hotels, Churches, Cinemas, Halls and other important buildings have been, and are being, faced with "TUDOR" Bricks.

EAGLESCLIFFE "REDRUF" FACINGS



THIS MACHINE-MADE FACING BRICK needs little introduction, as we believe it was the first moderately priced brick of its kind to be produced in the North of England.

It is, perhaps, not usually known that its manufacture is different from that of most bricks of this type. In any machine-made brick, when the skin of the brick is "opened," for the purpose of giving a sand-faced effect, there is the danger of perishing occurring at some future time, owing to the body being exposed to the action of the weather. In most instances the body is only thinly covered by a machine application of sand.

In the case of the " REDRUF " brick, however, this risk of perishing is minimized by the use of crushed and powdered Whinstone, procured from our own Quarry neighbouring these Works, instead of sand. As a result the face is hardened to a degree unknown by the use of sand, affording an excellent skin or protection for the body.

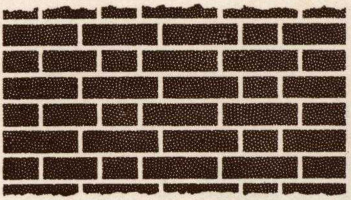
" REDRUF " facings are produced in a standard 9" × 4½" × 3" size, but can be made to any thickness to order.

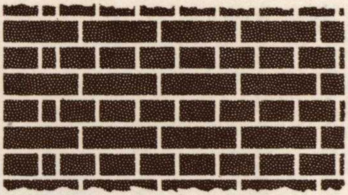
* * *

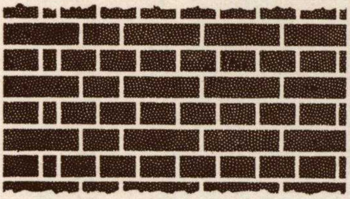
THE FOLLOWING BUILDINGS ARE FACED WITH " REDRUF " BRICKS :—

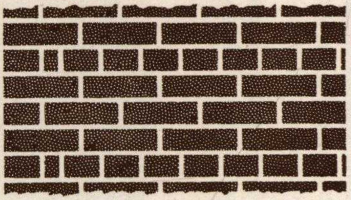
THE JEWISH SYNAGOGUE, SUNDERLAND.
HOUGHTON-LE-SPRING SECONDARY SCHOOL.
THE CARTER BEQUEST HOSPITAL, MIDDLESBROUGH.
THE BAPTIST CHURCH, SOUTHFIELD ROAD, MIDDLESBROUGH.
THE MASONIC HALL, CASTLE EDEN.
PANNETT ART GALLERY, WHITBY.
THE PALATINE HOTEL EXTENSIONS, SUNDERLAND.
THE MASONIC HALL, WETHERBY.
BRANCEPETH MINERS WELFARE INSTITUTE, WILLINGTON.
TRIMDON MINERS WELFARE INSTITUTE.
QUARRINGTON HILL MINERS WELFARE INSTITUTE.
HOUGHALL FARM INSTITUTE, DURHAM.

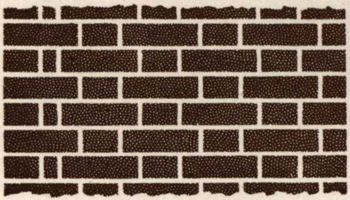
BONDS

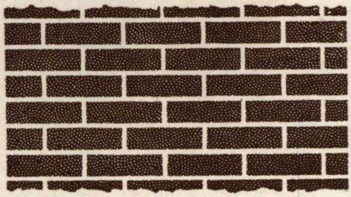

FLEMISH GARDEN WALL


ENGLISH (Old English)


ENGLISH CROSS


ENGLISH GARDEN WALL


FLEMISH


STRETCHER

GAUGES

5 Courses ..	2″ Brick ..	.. ⅜″ Joint	=	11⅞″	rising
4 Courses ..	2⅝″ Brick ..	.. ⅜″ Joint	=	12″	rising
4 Courses ..	2⅞″ Brick ..	.. ⅜″ Joint	=	13″	rising
5 Courses ..	2″ Brick ..	.. ½″ Joint	=	12½″	rising
4 Courses ..	2⅝″ Brick ..	.. ½″ Joint	=	12½″	rising
4 Courses ..	2⅞″ Brick ..	.. ½″ Joint	=	13½″	rising
5 Courses ..	2″ Brick ..	.. ⅝″ Joint	=	12⅝″	rising
4 Courses ..	2⅝″ Brick ..	.. ⅝″ Joint	=	13″	rising
4 Courses ..	2⅞″ Brick ..	.. ⅝″ Joint	=	14″	rising

APPROXIMATE NO. OF BRICKS PER YARD SUPER OF 4½″ WORK IN STRETCHER BOND :

2″ Brick ..	.. ⅜″ Joint	=	60 Bricks
2¹⁄₁″ Brick ..	.. ⅜″ Joint	=	55 Bricks
2⅝″ Brick ..	.. ⅜″ Joint	=	48 Bricks
2⅞″ Brick ..	.. ⅜″ Joint	=	44 Bricks

BRICKS

MACHINE-MADE WIRE-CUT COMMONS

THE joint output from our Coatham Stob, Egglescliffe, Bowesfield, and South Bank Brickworks places us as the largest producers of common bricks on Tees-side.

For many years we have held this premier position, and are thus able to supply bricks where large quantities are required, and guaranteed delivery rates are essential. This is possible throughout the year, ensuring that rapid and smooth running progress so essential to the modern contract.

Great care is taken to maintain our high standard and quality, and a Fleet of well-equipped tipping lorries, operated by our own Transport Department, ensures the bricks being speedily delivered to site in good condition.

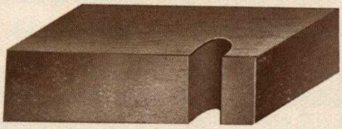
All the Works enumerated have their own Sidings for dealing with rail orders.

Standard thicknesses are : 3″ and 2⅝″. Other thicknesses can be made to order.

BRICKS

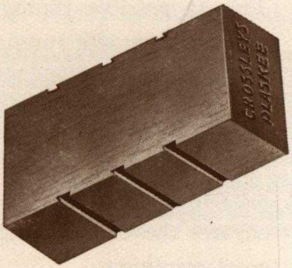
INCIDENTAL to the common brick, and for use in internal brickwork, the same works manufacture the following specialities :—

CONDUIT BRICK.



This brick is made with a groove for accommodating the electrical wiring of a building. It saves cutting after the brickwork has been walled, and ensures the plaster work not being interfered with by the cable. The groove can be made in any position on the brick as required.

" PLASKEE " (*Regd.*) BRICK.

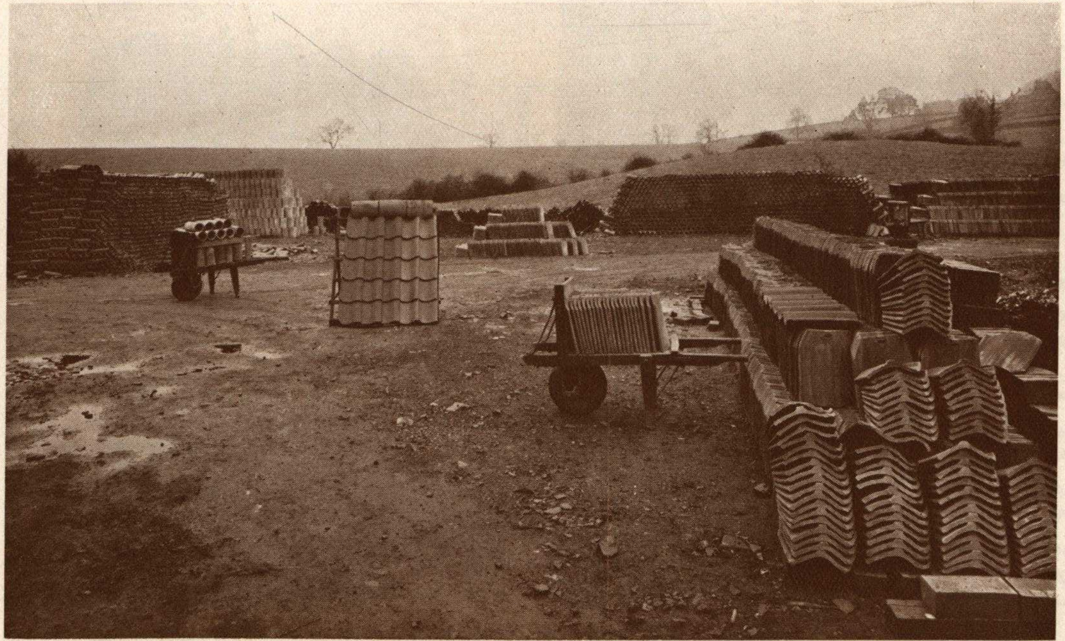


This brick has long been recognised as the most efficient brick base for plaster and external rough-cast, the dovetailed grooves giving a perfect key. They can be supplied in the following arrangements :-

1. One stretcher face only grooved—for use as common brick backing to external facing, or outside work where roughcast.
2. One stretcher and one header—for similar use where plaster work is returned on the 4½″, as in window and door openings.
3. Two stretcher faces for 4½″ partition wall, where plastered both sides.

The slight extra cost of these bricks over ordinary common bricks certainly merits consideration where a good plaster job is required, and their use certainly eliminates any risk of outside cement rendering or roughcast " peeling off " or cracking.

ROOFING TILES



VIEW OF PANTILE STOCK.

THE above photograph shows the stock of Pantiles at our Danby Works. This yard has been producing Pantiles for upwards of 100 years, and many of the charming roofs in the North Riding are covered with them. Both machine-made and hand-made Tiles are manufactured here.

ROOFING TILES

"TUDOR" HAND-MADE SAND-FACED FLAT TILES

"TUDOR" hand-made sand-faced Flat Tiles are produced at our Commondale Works, and owing to their wide natural colour range have been largely used in conjunction with "TUDOR" Facing Bricks. They are a strong ½″ in thickness, and this, plus that slight irregularity of any good hand-made tile, enables that character so often seen in old buildings, and so often sought after in new, to be imparted to any roof they cover.

The following data may be of service to anyone contemplating their use :

Size	*Weight per thousand*
10½″ × 6½″	1 Ton 5 Cwts.

APPROXIMATE COVER OF 10½″ × 6½″ FLAT TILES.

Gauge 4½″ or lap 1½″ = 493 tiles per square
★Gauge 4″ or lap 2½″ = 555 tiles per square
Gauge 3¾″ or lap 3″ = 590 tiles per square
Gauge 3½″ or lap 3½″ = 633 tiles per square
Gauge 3¼″ or lap 4″ = 682 tiles per square
Eaves and top tiles = 5½ tiles per lin. yard
Tile and a half = 1½ tiles per ft. gable

The lap is that portion of the tile covered by the second row above it.

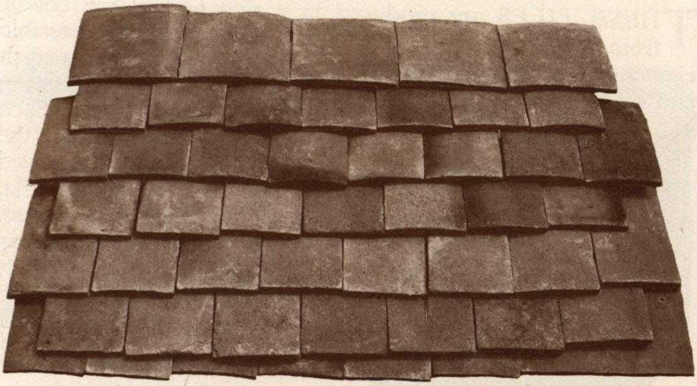
To obtain the gauge deduct the lap from the length of the tile, and divide by two.

★ Common or ordinary gauge.

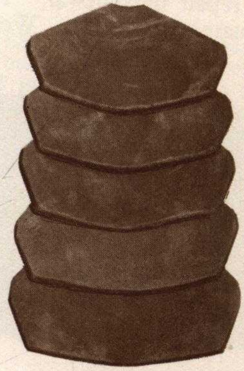
ROOFING TILES

continued.

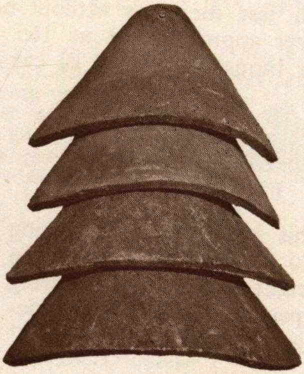
"TUDOR" HAND-MADE SAND-FACED FLAT TILES.



VALLEY TILES.



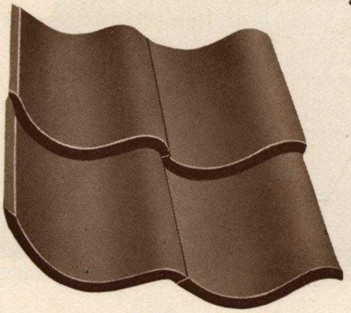
BONNET HIPS.



Made in same colourings and from same clays as our "TUDOR" Hand-made, Sand-faced Bricks. For colour photos. see pages 75, 77 79, 81, 83, 85.

DANBY HAND-MADE SAND-FACED PANTILES

THESE TILES are produced in a rich natural red colour from De-aired clay by hand, thus eliminating any possible chance of lamination. They are made with a deeper dish and heavier roll than the average pantile, and have a charming appearance when laid. Each tile is holed for nailing, the hole being slightly removed from the centre of the tile, thus being off the water course. Laid at $11\frac{3}{8}$ gauge with $3\frac{1}{4}$ lap these tiles cover approximately at 14 per yard super. Weight per thousand, 2 tons 17 cwts.

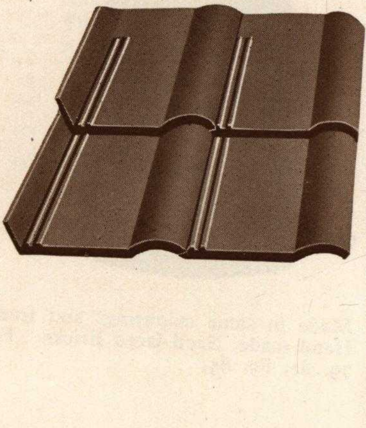


DANBY MACHINE-MADE PANTILES.

This is the traditional tile of North Yorkshire. It is an easy tile to fix, economical in use, and provides a roof which will last for years without need of repair or renewal. They cover approximately at 165 per square of roofing. Weight per thousand, 2 tons 12 cwts.

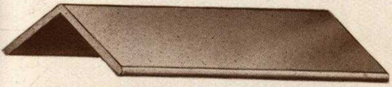
DANBY MACHINE-MADE FRENCH TILE.

This is an extremely strong and durable tile, similar in weight and cost and covering capacity to the machine-made pantile.

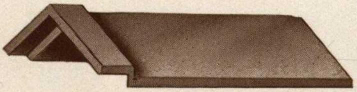


RIDGE TILES

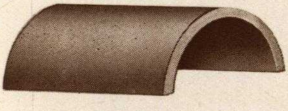
HALF-ROUND, Hog's Back, or Angle Ridge Bonnet-Hips, Eaves and Top Tiles, Tile and a half, Valley Tiles, Hip Stop Ends, etc., made to suit pitch as required.



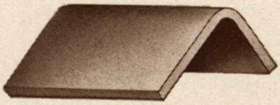
Plain.



Capped.



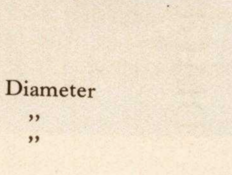
Half Round Plain.



Hog's Back.

FAWCETT VENTILATOR

DESIGNED by a practical Land Agent and expert on Dairy Farm buildings, this Ventilator is specially made for Cow Byres and is fixed in the main ridge in the ordinary way as a ridge tile. It provides a perfect means of ventilation, does not allow rain or snow to enter the building, and is of such a size in its air shaft that it is nearly impossible for it to get made up with dirt, and thereby defeat its own object. Can be supplied in Red, Buff, or Salt-Glazed terra-cotta.

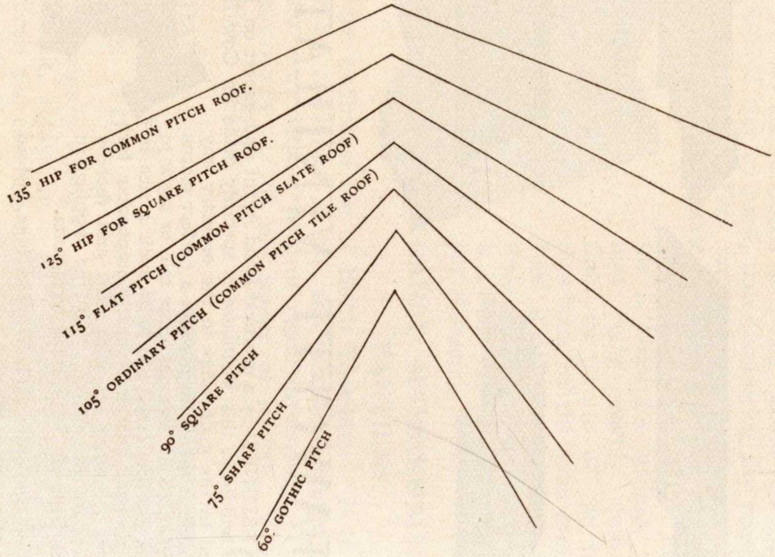


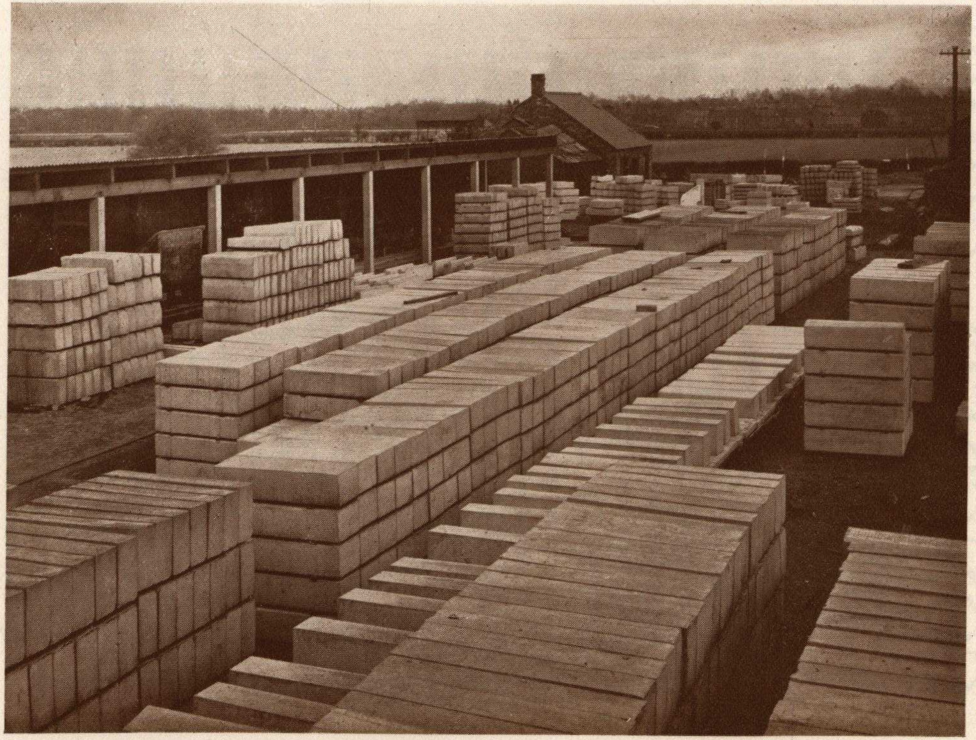
Supplied,to order, on half-round ridge, instead of angle ridge as shown.

SIZES :—

Vertical Shaft	6"	Internal	Diameter
Horizontal Shaft	4"	"	"
Side Shafts	3"	"	"
Height above ridge	16"		
Overall width	26"		
Ridge, plain	7"	Wing. 105°.	

DIAGRAM SHOWING PITCH OF RIDGE TILES.


135° HIP FOR COMMON PITCH ROOF.
125° HIP FOR SQUARE PITCH ROOF.
115° FLAT PITCH (COMMON PITCH SLATE ROOF)
105° ORDINARY PITCH (COMMON PITCH TILE ROOF)
90° SQUARE PITCH
75° SHARP PITCH
60° GOTHIC PITCH



VIEW OF CONCRETE STOCK AT EAGLESCLIFFE WORKS.

PRE-CAST CONCRETE GOODS

THERE is probably no material which can be put to a greater variety of uses than what we know to-day as Pre-cast Concrete. It is also true to say that by virtue of the fact that its main uses are as substitutes for natural stone, it is very necessary that concrete goods should possess those desirable qualities of age-long durability, negligible porosity, and in the case of flags, paving, etc., ability to stand up to whatever severe test may be put upon it, that natural stone possesses.

Speaking generally, two factors govern the quality of Pre-cast Concrete :

1. The ingredients or materials from which it is made ;
2. The age of the goods when put into use.

The basis of all Concrete goods is cement, and suffice it to say that in all our goods we use only British Portland Cement. The aggregate with which the Cement is mixed is equally as important as the Cement itself, and is a subject receiving more marked attention from Engineers, Surveyors, and those responsible for specifications, than it used to. It is obvious that the greater the degree of natural hardness of the aggregate, and its absolute freedom from anything likely to set up chemical action by contact with Cement, the better will be the resultant concrete. For that reason we use screened Whinstone from our own neighbouring Quarry, and the best available clean, sharp Sand.

PRE-CAST CONCRETE GOODS—*continued.*

Where a non-slip surface is required on such goods as flags, we make these to specification by incorporating finely-ground Carborundum in the surface, during manufacture, and not as a dressing after casting. Similarly, where a sandstone finish is required, crushed natural stone is used.

After manufacture, all goods are allowed to harden or mature slowly over a long period, until they are in such condition that there is no danger of disintegration after being fixed for use. Under no circumstances are goods despatched when they are " green." Goods are properly reinforced where necessary, or when specified to be so manufactured. As good concrete continues to harden with age and requires no preservative to help it withstand the ravaging effects of weather, its use is certainly the most economical for goods which in the past have been mainly made in wood, such as fencing-posts, gate-posts, etc. We also suggest its use for lintels, joists, etc., as a means of doing away with the cracking of plaster which can occur with unseasoned timber.

It is impossible to give a list of goods which can be made of Pre-cast Concrete, but on the following pages we enumerate a few which are being more or less made daily at our Works. We invite enquiries, however, for any we might not have mentioned.

CONCRETE GOODS

CONCRETE FLAGS.

SIZES

3′ 0″ × 2′ 0″
2′ 9″ × 2′ 0″
2′ 6″ × 2′ 0″
2′ 3″ × 2′ 0″
2′ 0″ × 2′ 0″
1′ 9″ × 2′ 0″
1′ 6″ × 2′ 0″

All in 2½″ or 2″ thickness.

2½″ Flags weigh approximately 9 square yards per ton.
2″ Flags weigh approximately 11 square yards per ton.

CONCRETE KERBS.

SIZES	WEIGHT
10″ × 8″ Flat	9 Lin. Yards per Ton
6″ × 12″ Edge ..	10 Lin. Yards per Ton
6″ × 10″ Edge ..	12 Lin. Yards per Ton
6″ × 9″ Edge ..	13 Lin. Yards per Ton

All in 3′ 0″ lengths. Radius Kerbs made to specification.

REINFORCED KERB EDGING (for Grass Verges, etc.)

2″×6″ Flat Topped . 60 Lin. Yards per Ton
Made in 3′ 0″ and 6′ 0″ lengths.
2″×7″ Round Topped 50 Lin. Yards per Ton
Made in 3′ 0″ lengths.

CONCRETE CHANNEL.

SIZES	WEIGHTS
12″ × 6″	10 Lin. Yards per Ton
8″ × 6″	13½ Lin. Yards per Ton
6″ × 4″	27 Lin. Yards per Ton

Made in 3′ 0″ lengths.

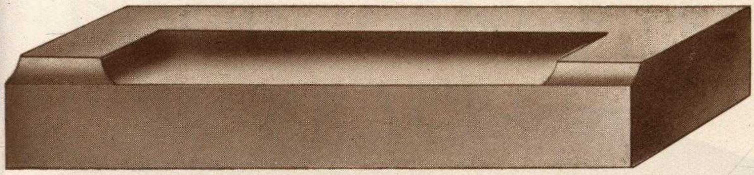
CONCRETE STEPS.

SIZES	WEIGHTS
12″×6″ or 6½″ Bull-nosed	10 Lin. Yards per Ton
12″×6″ or 6½″ Plain ..	10 Lin. Yards per Ton
10″×6″ or 6½″ Plain ..	12 Lin. Yards per Ton
9″×6″ or 6½″ Plain ..	13 Lin. Yards per Ton

Made in lengths required.

CONCRETE GOODS

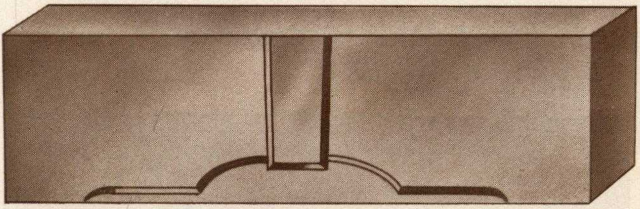
CONCRETE CILLS (Weathered and Throated).



Sizes 11″ or 10½″ × 6½″
11″ or 10½″ × 3½″
6½″ or 6″ × 3″ or 3½″

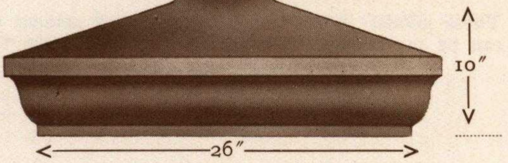
Made to opening required.

CONCRETE HEADS.



Size 10″ × 4½″
In plain chamfered, or " Keystone " design.
Made to opening required.

CONCRETE BALL PILLAR CAP.

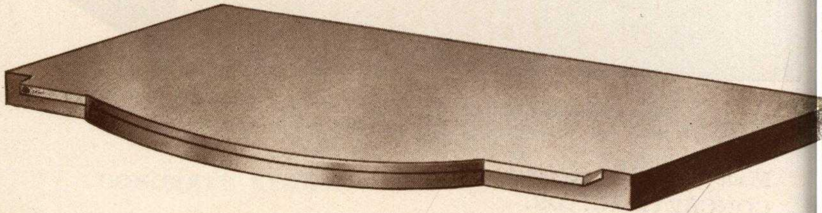


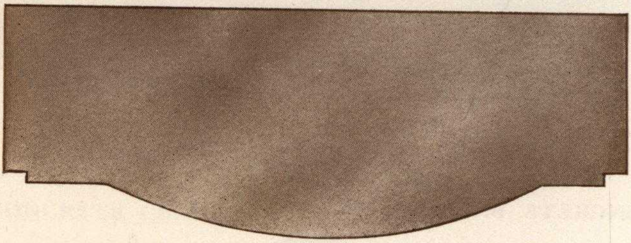
Or to size required.

These goods, if not required in natural cement colour, can be produced in other colours.

CONCRETE GOODS

DOOR HOOD

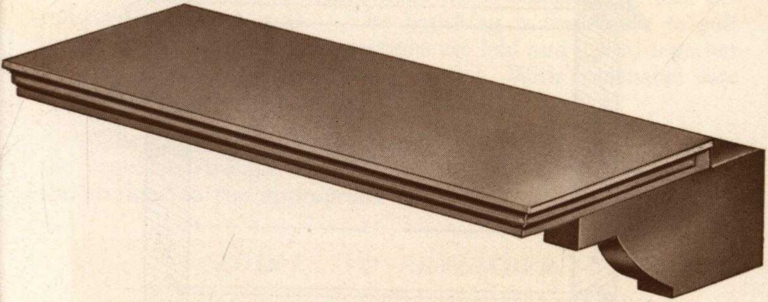


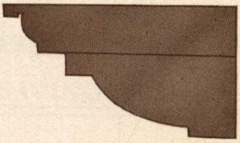


5′ 11″ × 24″ × 3¼″

These goods, if not required in natural cement colour, can be produced in other colours.

CONCRETE DOOR CANOPIES *and* BRACKETS





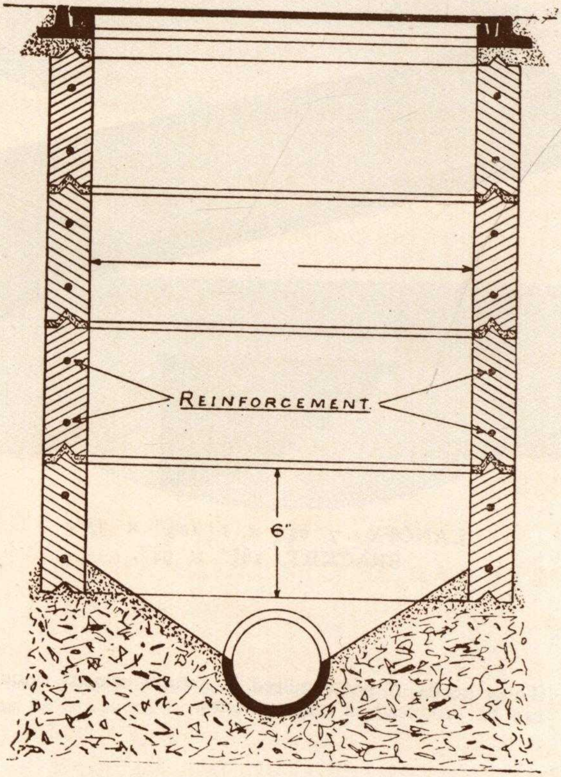
CANOPY 7′ 6¾″ × 1′ 10½″ × 3¾″.
BRACKET 18¾″ × 9¾″.

These goods, if not required in natural cement colour, can be produced in other colours.

"QUICBILT" REINFORCED CONCRETE SECTIONS

(PAT. APPLIED FOR 14135 / 1934).

For MANHOLES, CESS PITS, LININGS, Etc.
Standard Sizes kept in Stock.



Section of Inspection Chamber constructed with "Quicbilts."
Each section is 6″ of complete Chamber.
No further work necessary.

"QUICBILT" SECTIONS

continued.

THIS device is designed to obviate the labour of making brick manholes and save the cost of bricks. Only unskilled labour is necessary.

These "QUICBILT" sections are square in shape and fitted on their adjoining edges with self-centreing tongues and grooves. This simplifies laying.

Each section is 6 inches deep by 2 inches thick and reinforced with iron rods. The benching is first made to suit drain connections, then the sections are laid and joined together by a composition of cement and sand. With reasonable care there is absolutely no danger of leakage.

Where, owing to depth, larger "QUICBILTS" are used, the requisite strength can be obtained by concreting behind the sections to the appropriate thickness.

POINTS TO REMEMBER.

NO BRICKS ARE REQUIRED.

NO SKILLED LABOUR IS REQUIRED.

CONSIDERABLE SAVING IN MATERIAL & ERECTION COSTS.

COST OF EXCAVATION IS REDUCED BY 25%.

CHAMBER CAN BE COMPLETED AT ONCE.

CHAMBERS CANNOT BE OUT OF SQUARE.

THE SURFACE IS DEAD SMOOTH AND DOES NOT REQUIRE FACING.

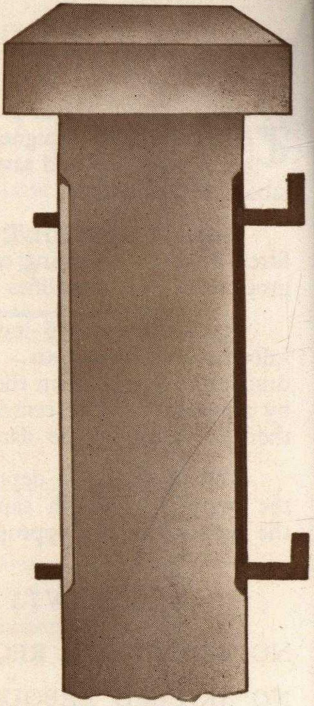
IDEAL FOR BAD GROUND, AS LEAKAGE IS IMPOSSIBLE.

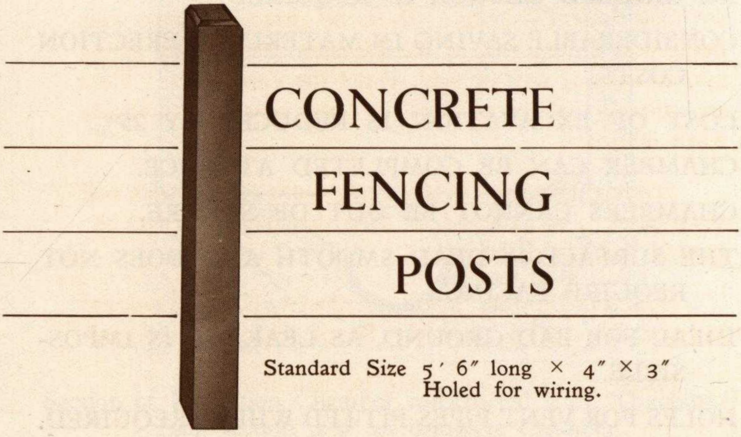
HOLES FOR VENT PIPES FITTED WHERE REQUIRED.

CONCRETE
GATE
POSTS

●

Size 9″ x 9″
Chamfered Edge
to length required.





CONCRETE
FENCING
POSTS

Standard Size 5′ 6″ long × 4″ × 3″
Holed for wiring.

These goods, if not required in natural cement colour, can be produced in other colours.

CONCRETE AND THE FARMER

SINCE the Milk Marketing Board insists that Grade "A" milk be produced under more hygienic conditions than exist on many milk producing farms, Concrete has become an important feature in the construction or reconstruction of most farm buildings. As a result of this, it is being gradually appreciated that Concrete is more efficient and is, in the long run, cheaper than, for instance, wooden stalls, brick floors, or gravel roads. It is cheap to buy and fix, very easy to wash down and keep clean, and never requires any preserving treatment such as paint or stain. If laid or fixed correctly, it is practically everlasting.

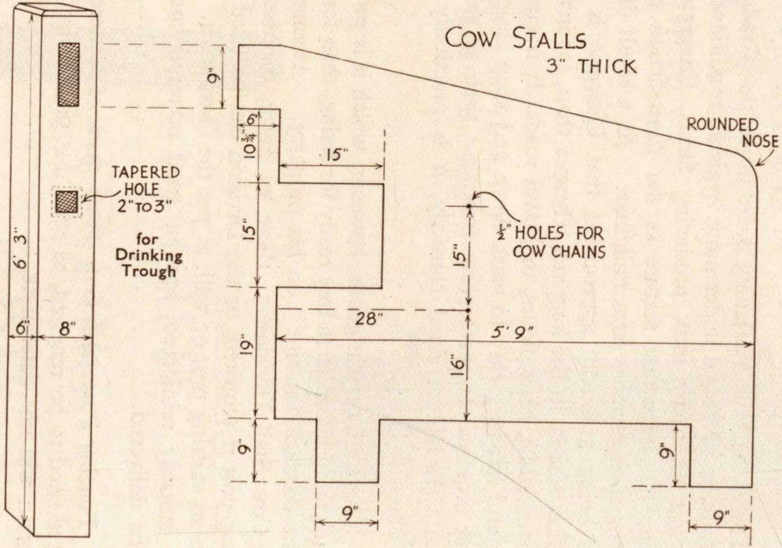
There are certain goods, however, which it is probably better for the farmer to buy ready for fixing, than for them to be erected " in situ " on his property. Among these are Cow Stall Divisions ; these we make, together with fixing-post if required, or the Division can be fixed direct into an existing post or wall, as per the illustration. They are suitably reinforced, and in good matured condition when delivered.

Fencing Posts and Gate Posts made of Concrete will never need to be renewed, as even that part buried in the ground will not deteriorate.

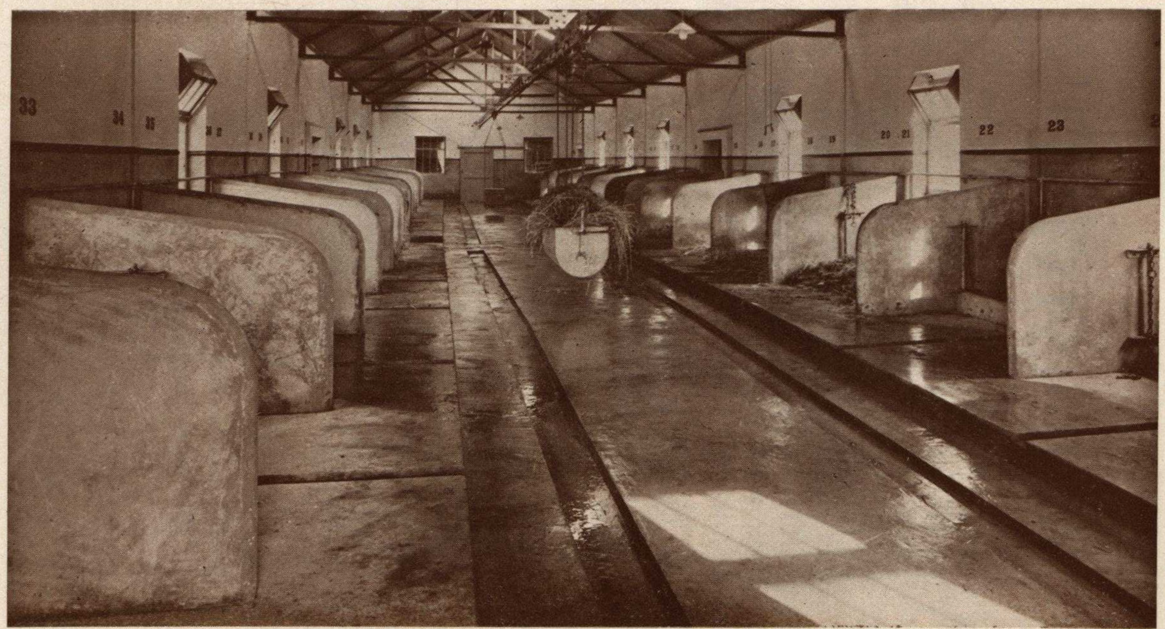
Enquiries for other goods not shown, such as Concrete Manger, Troughing, Feeding Boxes, etc., are solicited.

Prices quoted to any point, per rail or road.

CONCRETE COW STALL DIVISIONS



SECTION.



SET OF CONCRETE COW STALL DIVISIONS

In byre at Messrs. Imperial Chemical Industries Ltd., Saltholme Experimental Farm, Haverton Hill, Co. Durham.

Contractors: Messrs. John Fletcher & Sons, Norton-on-Tees.

WHINSTONE

WHINSTONE is the name given in the North to the hard resistant igneous rocks of a Granite-like nature, but even in the district it is not generally known that there are few Granites in the Kingdom which can compare in crushing strain and attrition test with the Whinstone of Durham and Northumberland with a crushing strain of over 40,000 lbs. per square inch, or 2,600 tons per square foot.

At our Quarries at Eaglescliffe we work by open quarrying what is geologically known as the Great Cleveland Dyke at a depth not previously worked by any other quarry on the Dyke and thus obtain the excellent stone which particularly lies at these lower levels.

The fine grain and intense hardness of Whinstone makes it a difficult stone to fracture cubically, but by the modern machinery we have installed we are now able to produce a sample which compares favourably with other more readily crushed rocks. All sizes from 2¼″ to ¼″ are produced.

The main uses of Whinstone may be said to be :

1. For Roadmaking ;
2. As Concrete aggregate.

WHINSTONE—*continued.*

For main road construction hard igneous rock is now regarded as necessary for use in Bitumenized or Asphaltic Roads, whilst for road surfacing it is regarded as imperative in the interests of road safety by reason of the fact that the hardness of the stone maintains a roughened surface so essential to all forms of traffic, whilst by the greater life obtained the ultimate cost is reduced.

The use of Cement for road construction is extending rapidly, and as an aggregate, Whinstone or Granite is being specified by the leading Road Authorities because the wear of the road must ultimately depend upon this quality in the aggregate, therefore only the hardest of stone should be used.

In view of our remarks on Pre-cast Concrete Goods, we think there is little need to stress the qualities of Whinstone as a general concrete aggregate. We repeat ourselves, however, by saying that the aggregate is equally as important as the cement, and by the use of good, hard, clean aggregates, better results can be obtained at no extra cost.

Prices of all sizes, by road or rail to any point, will be gladly quoted upon receipt of enquiry.

TRANSPORT

THAT much-used phrase, "Time is Money," is probably more truthfully applicable to the building trades than to any others. The difficulty of stocking total requirements on a contract—owing to the bulk size of the materials and the limited space available on the site, plus those delays occasioned by inclement weather stopping certain work going on, necessitates speedy and efficient transport of materials from suppliers to site as required by the contractor.

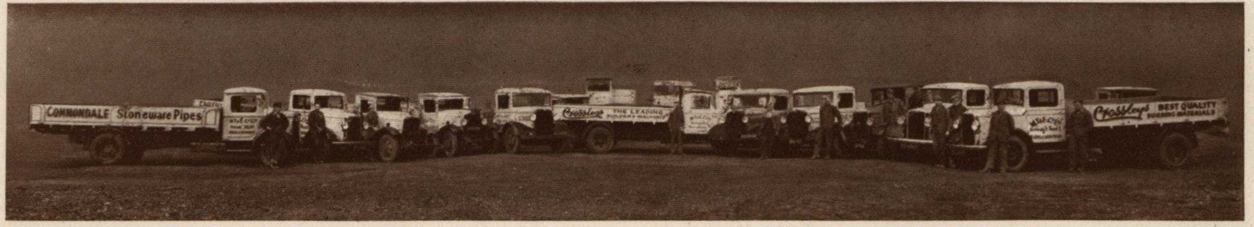
THE MIDDLESBROUGH TRANSPORT & ENGINEERING CO. LTD., is singularly well-equipped to render this efficient service. The Company operates a fleet of some twenty modern lorries which are engaged practically solely in the carrying of building materials. Perfect liaison between the Transport Company, Messrs. Crossley & Sons Ltd. Head Office, and the various Works is maintained. The fleet is centralised in an up-to-date garage and serviced by a staff of expert mechanics. In this manner the risks of delay in delivery, breakdowns, or mistakes in points of delivery are reduced to a minimum when goods are carried by "M.T.E."

This Company operates individually and is in a position to transact private and commercial motor and accessories sales. Petrol supplies are stocked, a modern electric pump being installed at the garage in Borough Road. Good stocks of spares are carried. Repairs are expeditiously carried out at competitive prices. Any enquiries will be promptly dealt with.

MIDDLESBROUGH TRANSPORT & ENGINEERING
CO. LTD.,

Borough Road,
Middlesbrough.

Telephones: No. 3695
(*2 lines*)


COMMONDALE Stoneware Pipes
Crossleys
THE LEADING BUILDERS MERCHANTS
Crossleys
BEST QUALITY BUILDING MATERIALS

FLEET OF LORRIES OPERATED BY OUR ASSOCIATED COMPANY
THE MIDDLESBROUGH TRANSPORT & ENGINEERING CO. LTD.

NOTES